## SUBJECT INDEX

## A

## Absorbers. See under Equipment

Acid-base equilibrium
acidosis
metabolic, acute, in fetal lamb following maternal labetalol administration [Yeleswaram, Rurak, Hall, McMorland, Axelson], A1076

## alkalosis

extracellular, injury of cortical neurons due to oxygen-glucose deprivation exacerbated by, In Vitro [Giffard, Choi], A611

## metabolic

acidosis, acute, in fetal lamb following maternal labetalol administration [Yeleswaram, Rurak, Hall, McMorland, Axelson], A1076
pH
intracellular, in C fibers, halothane inhibits regulation of [Kracke, Mills, Drake], A597
sodium bicarbonate improves cardiac resuscitability, 24 hour survival and neurological outcome after ten minutes of cardiac arrest in dogs [Bircher], A246
Acidosis. See under Acid-base equilibrium

## Acupuncture

P6, droperidol and vomiting after pediatric strabismus repair [Yentis, Bissonnette], A3
Adenosine. See under Anesthetic techniques, hypotensive; Pharmacology
Adenosine triphosphate. See under Metabolism
Adrenal hormones. See under Hormones
Adrenergic receptors. See under Receptors
Adrenocorticotropic hormones. See under Hormones

## Age factors

age-related differences in kinetics of deoxygenation during deep hypothermic circulatory arrest [Steven, Kurth, Phoon, Nicolson, Chance], A969
ASA physical status and, predict morbidity following three surgical procedures [Cullen, Cleary, Guadagnoli, Chittenden], A872
cerebral microvascular effects of fentanyl, sufentanil, and alfentanil in piglets [Monitto, Kurth], A542
children, during $\mathrm{N}_{2} \mathrm{O}$-halothane anesthesia, neuromuscular blockade following ORG 9426 in [O'Kelly, Frossard, Meistelman, [O'Kelly, Frossard, Meistelman, Ecoffey], A787
comparison between kittens and adult cats: differential sensitivity to halothane anesthesia of genioglossus, intercostals, and diaphragm [Ochiai, Guthrie, Motoyama], A925
elderly, histamine release following atracurium in [Shorten, Goudsouzian, Ali], A782
elderly surgical patients, pharmacokinetics and pharmacodynamics of ORG 9426 in [Matteo, Ornstein, Schwartz, Stone, Ostapkovich, Spencer, Dee], A1065
infants, children, and adults, pharmacokinetics of pipecuronium in [Tassonyi, Pittet, Schopfer, Gemperle, Rouge, Morel], A777
infants, dose-response relationship of mivacurium chloride in, during nitrous oxide-halothane anesthesia [Woelfel, Brandom, McGowan, Cook], A775
kinetic estimates of volumes and perfusions for volatile anesthetics in humans affected by [Strum, Eger, Unadkat, Johnson, Carpenter], A375
neonatal rat cardiomyocytes, effect of fentanyl on ANP secretion in [Mekhail, Doss, Estafanous, Khairallah], A328
newborn lambs, peripheral and cerebral hemodynamic effects of epidural anesthesia in [Yaster, Koehler, Traystman], A918
pediatric patients, transtracheal Doppler in, effects of growth on measurements [Saeki, Namba, Nakayama, Tokioka, Morita, Hirakawa], A459
propofol versus, pharmacokinetics of [Dyck, Varvel, Hung, Shafer], A315
transdermal fentanyl and, pharmacokinetics of [Esteve, Levron, Flaisler, Schoefler, Duvaldestin, Chauvin], A705
Air embolism. See under Embolism
Airway. See also under Equipment
resistance
airway reactivity and neuronal M2 muscarinic receptors [Okanlami, Hirshman, Fryer], A978
altered $\beta$-adrenergic cholinergic interaction in airways of basenji-greyhound dogs [Curry, Emala, Black, Hirshman], A976
following atracurium, is due to histamine release [Mehr, Lindeman, Hirshman], A974
mechanism of action of amrinone on airways [Lenox, Sauder, Grayson, Tobias, Hirshman], A977
mechanism of glucocorticoids in peripheral airways [Lindeman, Hirshman], A975
nedocromil attenuates constriction in peripheral airways [Downey, Lindeman, Hirshman], A979
Airway pressure. See under Ventilation
Albumin. See under Pharmacology

## Alcohol

effect of acetone and, on 3.3 NM infrared anesthetic agent monitors [Volgyesi, Crawford], A488
effects of, on spinal cord protein kinase [Austin, Firestone], A1041
effects of ethanol: photoacoustic spectroscopy [Alphin, Guyton], A419
ethanol
effect of, on MAC of halothane in humans [Slee, Cullen, Unadkat, Pavlin], A332
Alfentanil. See under Analgesics; Anesthetics, intravenous
Algesimeter. See under Pain
Alkalosis. See under Acid-base equilibrium
Allergy
latex, anaphylaxis on induction of anesthesia associated with [Setlock, Kelly], A1043
Almitrine. See under Pharmacology
Alpha-adrenergic agonists. See under Sympathetic nervous system

Alpha-adrenergic receptors. See under Sympathetic nervous system
E-Aminocaproic acid. See under Blood
Amiodarone. See under Pharmacology
Ampules. See under Equipment

## Amrinone. See under Pharmacology

Analgesia
contrasting action of intrathecal Kappa agonist (U50-488H) in visceral pain processing as compared to morphine and clonidine [Harada, Nishioka, Kitahata, Collins], A663
effects of subanesthetic xenon compared with nitrous oxide [Yagi, Mashimo, Kawaguchi, Pak, Yoshiya], A342
hydroxy-propyl-B-cyclodextrin as spinal drug delivery vehicle, systemic studies on use of: opioid analgesia in rats [Jang, Yaksh, Hill], A376
intracisternal, methadone and hydromorphone in [Brooks, Gupta], A722
intradermal bradykinin induces pain and hyperalgesia in humans [Manning, Raja, Meyuer, Campbell], A699

## measurement

single escalating doses of $\dot{G} 187084 \mathrm{~B}$ administered intravenously , analgesic efficacy of, in healthy adult male volunteers [Marton, Hardman, Kamiyama, Donn, Glass], A378
postoperative
3-in-1 block for, following anterior cruciate ligament reconstruction [Bingham, Indelicato, Duke, Merrell], A.735
after abdominal hysterectomy, transdermal fentanyl for [Reinhart, Hiller, Tyson, Zane, Mullins, Duke, Giesecke], A910
abdominal surgery pain management, double-blind comparison of epidural fentanyl and sufentanil with intravenous sufentanil for [Chrubasik, Geller, Graf, Zbinden, Thomson], A752
clonidine IV equally effective as morphine IV for: double-blind study [Tryba, Zenz, Strumpf], A1085
comparison of epidural clonidine and bupivacaine for [Carabine, Milligan, Moore], A1083
continuous epidural versus intravenous patient controlled: vital capacity after thoracotomy [Vanhoorebeeck, Vertommen, Van Aken, Vandermeersch], A116
continuous infusion of low-dose morphine for postoperative analgesia in children [Taylor, Boswell], A937
controlled, in morphine patient, enhanced by intraoperative clonidine [Dekock, Pichon, Scholtes], A654
effect of diclofenac sodium on post-laparoscopy pain [Gillberg, Harsten, Stahl], A21
effect of intraoperative ketoralac on recovery after outpatient laparoscopy [DeLucia, White], Al4
effect of ketorolac on postoperative narcotic requirements of gynecological surgery outpatients [Prados, Blaylock], A6
effect of thoracic epidural anesthesia on pulmonary function in normals [Speight, Rauck, Mann], A729
effects of night-time opioid infusion on requirement [Parker, Holtmann, White], A676
efficacy of ketorolac 15 mg or 30 mg in combination with morphine PCA in postoperative gynecological surgery patients [Sevarino, Ning, Sinatra, Silverman, Brull], A1090
efficacy of two doses of transdermal fentanyl as assessed by IV PCA morphine for, following intra-abdominal gynecological surgery [Sevarino, Naulty, Sinatra, Conry, Silverman], A706
epidural, for chronic cancer patients taking oral narcotics [de Leon-Casasola, Myers, Donaparthi, Bacon, Peppriell, Rempel, Lema], A665
epidural, patient-controlled, pharmacokinetic profiles under morphine, methadone, fentanyl, and sufentanil [Chrubasik, Chrubasik, Magora], A753
epidural, using bupivacaine and opioid versus subcutaneous morphine: pulmonary complications after abdominal surgery [Farhat, Thomas, Rey, Bourgain, Desruennes, Jayr], Al26
epidural anesthesia/analgesia versus general anes-thesia/patient-controlled analgesia: endocrine response to surgical stress [Norris, Parker, Breslow, Crowley, Frank, Rock, Christopherson, Beattie], A696
epidural clonidine reduces epidural fentanyl requirements and side effects in [Delaunay, Leppert, Dechaubry, Baubillier, Bonnet], A1086
epidural fentanyl and PCA morphine in post-thoracotomy pain, double-blind comparison of [Benzon, Wong, Belavic, Locicero], A712
epidural narcotics do not delay return of bowel function following major colon surgery [Hart, Faul, Buhrman], A669
epidural opiates for, in pediatric patients: morphine versus fentanyl [Lejus, Roussiere, Testa, Ganansia, Ricard], A941
epidural versus intravenous alfentanil by PCA in [Hongnat, Bellenfant, Levy, Alfonsi, Chauvin], A754
evaluation for, following gynecological surgery: new fentanyl transdermal delivery system [Freedman, Kreitzer, Atlin, Eisenkraft, Sebel], A708
failure of ketorolac to prevent severe postoperative pain following laparoscopy [Pandit, Kothary Lebendom-Mansour, Levy, Randel, Mathai], A33
intra-articular morphine or bupivacaine following arthroscopic knee surgery efficacy of [Heard, Edwards, Ferrari, Hanna, Willock], A670
intranasal fentanyl titration for [Striebel, Gottschalk, Kramer], A671
intrathecal morphine and fentanyl with and without bupivacaine for, after major abdominal surgery [Gwirtz, Peneff], A672
intravenous versus epidural fentanyl: stress response after thoracotomy [Mavrocordatos, Guinard, Chiolero], A697
is postthoracotomy pain syndrome affected by technique for? [Miguel, Hubbell], A763
low dose epidural morphine, proglumide potentiates analgesic effect of [Chen, Tsai, Mok, Lippmann], A686
lumbar epidural fentanyl reduces pain following thoracic surgery, pre-incisional versus post-incisional: randomized double-blind crossover study [Kavanagh, Katz, Sandler, Nierenberg, Panos], A1087
after major orthopedic surgery: transdermal fentanyl delivery system versus morphine IM: [Boerner, Bell, Bartkowski, Torjman, Lessin, Marr], A709
management of pediatric anti-reflux surgery, comparison of epidural opioids and intravenous opioids in [McNeely], A689
meperidine requirements not reduced by clonidine [Striebel, Gottschalk, Kramer], A659
morphine consumption, effects of anesthetic technique on [Samra, Willis, Ganta, Pundit], A666
nalbuphine ameliorates pruritus caused by continuous epidural bupivacaine-fentanyl in [Newman, Dragisic, Lubenow, McCarthy, Ivankovich], A770
nurse-controlled versus patient-controlled, following pediatric scoliosis surgery [Weldon, Connor, White], A935
opioid requirement and recovery profile, effect of ketorolac on [Parker, Holtmann, White], A758
patient-controlled versus epidural, with morphine or bupivacaine/morphine: postoperative outcome after abdominal surgery [Rockemann, Seeling, Bothner, Eifert, Zeininger], A1088
pediatric patient-controlled, with morphine versus meperidine [Vetter], A692
plasma and lung lymph, interpleural bupivacaine in, pharmacokinetics of [Suresh, Johnston, Traber, Traber, Arens], A756
postcesarean, combination of low dose epidural morphine and intramuscular diclofenac sodium for [Sun, Wu, Lin, Chang, Mok], A745
post-cesarean delivery, epidural versus intravenous butorphanol for [Loferski, Camann, Stone, Datta], A848
post-hysterectomy, transdermal fentanyl for, double-blind placebo-controlled trial of [Sandler, Baxter, Norman, Samson, Friedlander], A707
posthoracotomy pain relief: does technique really make a difference? [Miguel, Hubbell], A1091
potency and action site of epidural fentanyl, following gastrectomy [Inagaki, Mashimo, Yoshiya], A47
potentiated by addition of droperidol to PCA monitoring sulfate [Freedman, Kreitzer, Atlin, Reuben, Eisenkraft], A668
route of PCA affects incidence of urinary retention following orthopedic surgery [Prados, Renfroe], A751
thoracic epidural fentanyl after thoracotomy, shorter hospital stay with [Guinard, Mavrocordatos, Cuttat, Chiolero], A698

## Analgesics

alfentanil
acute tolerance with, evidence for rapid onset of [Hiestand, Howie, Romaneli, Jopling, Rezaei, McSweeney], A322
effects of, on cardiovascular and hormonal stress response to tracheal intubation [Miller, O'Brien, Martineau, AbouHamad, Hull, Greenway, Hindmarsh], A82
effects of disease on protein binding [Stiller, Davis, Cook, McGowan], A963
hemodynamic effects and postoperative respiratory depression of, in outpatient surgery [Cheng, Chapman, Chung, Ong, Romanelli], A24
pharmacokinetic comparison of G187084B, novel ultra-short acting opioid, and [Hermann, Marton, Donn, Grosse, Hardman, Kamiyama, Glass], A379
pharmacokinetics and pharmacodynamics of, influence of Crohn's disease on [Gesink-van der Veer, Burm, Vletter], A327
ventilation and ventilatory depression produced by, effect of clonidine on, in volunteers [Jarvis, Duncan, Segal, Maze], A982
ventilatory depression induced by, not affected by ondansetron [Dershwitz, Di Biase, Rosow, Wilson], A321
vomiting after, effect of dosing method [Okum, ColonnaRomano, Horrow], A2

## brifentanyl

respiratory sensitivity to hypoxia and hypercapnia after [Cigada, Afifi, Glass, Esposito, Camporesi], A1097
buprenorphine
pretreatment, time dependent cocaine-induced increase in plasma LDH activity decreased by [Shukla, Bansinath, Goldfrank, Turndorf], A626

## fentanyl

assessing and characterizing hypnotic and analgesic effects of anesthetic drugs [Fukunaga, Fukunaga, Kikuta], A45
with bupivacaine and neonatal effects [Loftus, Hill, Cohen], A856
and bupivacaine mixture, stability of [Dawson, Bjorksten, Duncan, Barnes, Hellyar], A746
comparison of meperidine, sufentanil and, for intrathecal labor analgesia [Honet, Arkoosh, Huffnagle, Norris, Leighton], A839
dexmedetomidine and, anesthetic and hemodynamic interactions of, in dogs [Salmenpera, Szlam, Hug], A307
effect of, on ANP secretion in neonatal rat cardiomyocytes [Mekhail, Doss, Estafanous, Khairallah], A328
effect of, on ICP and CBF in rabbits with acute cryogenic brain injury [Sheehan, Scheller, Zornow, Peterson], A618
epidural, compared with intravenous sufentanil for abdominal surgery pain management [Chrubasik, Geller, Graf, Zbinden, Thomson], A752
epidural, does not worsen post-cesarean section analgesia when administered before epidural morphine [Vincent, Chestnut, Choi, Coffin, Ostman, Bates, Laszewski], A861
epidural compared with intravenous, reduction of halothane MAC by [Inagaki, Mashimo, Yoshiya], A323
epidural patient-controlled analgesia, pharmacokinetic profile under [Chrubasik, Chrubasik, Magora], A753
hemodynamic effects and postoperative respiratory depression of, in outpatient surgery [Cheng, Chapman, Chung, Ong, Romanelli], A24
intranasal titration, for postoperative pain management [Striebel, Gottschalk, Kramer], A671
intrathecal, comparison between sufentanil and, for labor analgesia, [Sharkey, Arkoosh, Norris, Honet, Leighton], A841
intrathecal, does not improve intrathecal morphine analgesia after cesarean section [Boerner, Norris, Leighton, Arkoosh, Torjman], A858
intrathecal, for labor analgesia [Zakowski, Goldstein, Ramanathan, Turndorf], A840
intrathecal, with and without bupivacaine, for control of postoperative pain after major abdominal surgery [ $G$ wirtz, Peneff], A672
modifications of resistive properties of respiratory system induced by, effect of PEEP on [Cohendy, Lefrant, Laracine, Rebiere, Eledjam], A132
oral transmucosal fentanyl citrate for procedures in children, safety and efficacy of [Conard, Rosenblum, Weisman, Schecter, Bartolotta, Altman, Quinn], A954
pharmacokinetics of, in congestive heart failure [Norgaard, Pineda, McGlinch, Zimmerman, Estrin], A325
reduction of isoflurane by [McEwan, Smith, Dyar, Goodman, Glass], A43
significantly increases ICP, in resuscitated head trauma patients [Bailey, Sperry, Reichman, Peterson, Petersen, Pace, Stanley], A198
transdermal, bioavailability and absorption rate of, [Fiset, Haack, Shafer], A326
transdermal, efficacy of two doses of, as assessed by IV PCA morphine for postoperative analgesia following intra-abdominal gynecological surgery [Sevarino, Naulty, Sinatra, Conry, Silverman], A706
transdermal, for post-hysterectomy analgesia, double-blind placebo-controlled trial of [Sandler, Baxter, Norman, Samson, Friedlander], A707
transdermal, for postoperative pain relief after abdominal hysterectomy [Reinhart, Hiller, Tyson, Zane, Mullins, Duke, Giesecke], A910
transdermal, new delivery system for: evaluation for pain relief following gynecological surgery [Freedman, Kreitzer, Alin, Eisenkraft, Sebel], A708
transdermal, pharmacokinetics of, aging and [Esteve, Levron, Flaisler, Schoefler, Duvaldestin, Chauvin], A705
transdermal delivery system, respiratory effects of, compared to fixed interval IM morphine following spinal surgery [Torjman, Bartkowski, Marr, Lessin, Boerner], A1101
transdermal delivery system versus morphine IM: comparison of analgesia after major orthopedic surgery [Boerner, Bell, Bartkowski, Torjman, Lessin, Marr], A709
transfer of, across arterial walls [Bernards, Hill], A685

## G187084B

pharmacokinetic comparison of alfentanil, novel ultra-short acting opioid, and [Hermann, Marton, Donn, Grosse, Hardman, Kamiyama, Glass], A379

## hydromorphone

in intracisternal analgesia [Brooks, Gupta], A722
is there relationship between controlled substance accountability and controlled substance abuse? [Klein, Stevens, Kingston], A881
ketorolac
efficacy of, in combination with morphine PCA in postoperative gynecological surgery patients [Sevarino, Ning, Sinatra, Silverman, Brull], A1090
meperidine
comparison of fentanyl, sufentanil and, for intrathecal labor analgesia [Honet, Arkoosh, Huffnagle, Norris, Leighton], A839
intrathecal, associated with bupivacaine: dose-range study [Bonnet, Nguyen Thi, Orliaguet, Liu, Delaunay], A747
methadone
epidural patient-controlled analgesia, pharmacokinetic profile under [Chrubasik, Chrubasik, Magora], A753
in intracisternal analgesia [Brooks, Gupta], A722
long-term therapy for chronic pain patients [Wan Lu , Urban, France], A719
morphine
epidurally [Rattan, McDonald, Tejwani], A760
assessing and characterizing hypnotic and analgesic effects of anesthetic drugs [Fukunaga, Fukunaga, Kikuta], A45
comparison of therapeutic margins of sufentanil and, during steady-state infusions in volunteers [Coda, Hill, Bernards, Luger, Hautman, Shields], A673
efficacy of ketorolac 15 mg or 30 mg in combination with, in postoperative gynecological surgery patients [Sevarino, Ning, Sinatra, Silverman, Brull], A1090
epidural, epidural fentanyl administered before, does not worsen post-cesarean section analgesia [Vincent, Chestnut, Choi, Coffin, Ostman, Bates, Laszewski], A861
epidural patient-controlled analgesia, pharmacokinetic profile under [Chrubasik, Chrubasik, Magora], A753
fixed interval IM, compared to respiratory effects of fentanyl transdermal delivery system, following spinal surgery [Torjman, Bartkowski, Marr, Lessin, Boerner], Al101
IM, transdermal fentanyl delivery system versus: comparison of analgesia after major orthopedic surgery [Boerner, Bell, Bartkowski, Torjman, Lessin, Marr], A709
intrathecal, not improved by intrathecal fentanyl, after cesarean section [Boerner, Norris, Leighton, Arkoosh, Torjman], A858
intrathecal, with and without bupivacaine, for control of postoperative pain after major abdominal surgery [ $G$ wirtz, Peneff], A672
IV infusion, respiratory effects of, in infants and toddlers following cardiac surgery [Lynn, Opheim, Nespeca, Slattery], A952
transfer of, across arterial walls [Bernards, Hill], A685
nalbuphine
hemodynamic effects and postoperative respiratory depression of, in outpatient surgery [Cheng, Chapman, Chung, Ong, Romanelli], A24
progesterone-mediated potentiation of spinal opiates [Carp, Jayaram], A838
sufentanil
assessing and characterizing hypnotic and analgesic effects of anesthetic drugs [Fukunaga, Fukunaga, Kikuta], A45
with bupivacaine and neonatal effects [Loftus, Hill, Cohen], A856
comparison of fentanyl, meperidine and, for intrathecal labor analgesia [Honet, Arkoosh, Huffnagle, Norris, Leighton], A839
comparison of therapeutic margins of morphine and, during steady-state infusions in volunteers [Coda, Hill, Bernards, Luger, Hautman, Shields], A673
effect of, on ICP and CBF in rabbits with acute cryogenic brain injury [Sheehan, Scheller, Zornow, Peterson], A618
epidural, compared with intravenous sufentanil for abdominal surgery pain management [Chrubasik, Geller, Graf, Zbinden, Thomson], A752
epidural, does it spread rostrally in spinal axis? [Petty, Stevens, Hill, Hahn, Kaol, A744
epidural administration during labor and delivery, maternal and neonatal plasma levels after [Kick, Vertommen, van Aken, GrySeels], A837
epidural patient-controlled analgesia, pharmacokinetic profile under [Chrubasik, Chrubasik, Magora], A753
intrathecal, comparison between fentanyl and, for labor analgesia, [Sharkey, Arkoosh, Norris, Honet, Leighton], A841
intrathecal sufentanil/tetracaine for cesarean section surgery [Pan, Mok], A743
significandy increases ICP, in resuscitated head trauma patients [Bailey, Sperry, Reichman, Peterson, Petersen, Pace, Stanley], A198
tolerance
acute, with alfentanil, evidence for rapid onset of [Hiestand, Howie, Romaneli, Jopling, Rezaei, McSweeney], A322

## Anatomy

cranial nerves IX and X: anatomic study [Woods, Lee, Reikersdorfer, Lander], A742
peridural space
new look at lumbar epidural anatomy [Hogan], A716
Anemia. See under Blood

## Anesthesia

biliary tract surgery
cholecystectomy, laparoscopy allows for reduction of acute phase reaction developing after [Joris, Cigarini, Legrand, Franchimont, De Groote Lamy], A229
laparoscopic cholecystectomy, diaphragm function and pulmonary complications after [Sha, Ohmura, Yamada], A255
laparoscopic cholecystectomy, dynamic respiratory patterns after [Shulman, Chuter, Weissman], A136
laparoscopic cholecystectomy, effect of nitrous oxide on surgical conditions during [Taylor, Feinstein, Soper, White], A330
laparoscopic cholecystectomy, postoperative pulmonary function deterioration prevented by? [Reed, Han, Sampson], A127
pain and pulmonary dysfunction after cholecystectomy under laparoscopy and laparotomy [Cigarini, Joris, Jacquet, Lamy], A122
postoperative lung function and stress response after laparoscopic cholecystectomy [Rademaker, deWit, Ringers, Odoom], A123
ventilatory effects of $\mathbf{C} \mathbf{Q}$ insufflation during laparoscopic cholecystectomy [Joris, Ledoux, Honore, Lamy], A121

## cardiovascular

$\beta$-adrenergic receptor desensitization during cardiopulmonary bypass [ Schwinn, Leone, Chestnut, Spahn, Page, Liggett], All19
aeric microemboli and transcranial Doppler: episodic frequency and timing in open heart surgery [Albin, Hantler, Mitzel, Bunegin, Grover], A53
amrinone in children after Fontan procedure for repair of complex cyanotic congenital heart disease, hemodynamic effects of [Sorensen, Lynn, Stevenson, French], A961
anesthetic morbidity in congenital heart disease patients undergoing outpatient surgery [Strafford, Henderson], A866
antegrade versus retrograde cardioplegia: influence on right ventricular function [Amory, Wanger, Weinstein], A150
assessment of microembolization during cardiopulmonary bypass by transesophageal echocardiography [Calalang, Shapiro, Schwartz, Queeno, Shah, Hick, Melzer], A64
association between blood glucose level during cardiopulmonary bypass and neuropsychiatric outcome [Frasco, Croughwell, Blumenthal, Will, Leone, White, Goodman, Reves], A55
cardiopulmonary bypass, does low-dose aprotinin reduce blood loss following? [Benmosbah, Madi, Castel, Kiefer, Cousin], A983
cardiopulmonary bypass, modification of hemostatic parameters during: effects of high-dose aprotinin [Gardaz, Hauert, Chassot, Parise, Bernath, Bachmann], A991
cerebral blood flow velocity is coupled to EEG activity during hypothermic cardiopulmonary bypass [Walker, Isley, Lucas, Kafer], A177
cerebral perfusion absent during extremes of low-flow cardiopulmonary bypass [Burrows, Bissonnette], A947
clonidine, reduction of catecholamine response to CABG surgery by [Hiestand, Howie, Romanelli, Jopling, Rezaei, McSweeney], A153
coagulation defects in neonates during CPB [Kern, Morana, Sears, Hickey], A63
comparison of propofol to ketamine for, in pediatric cardiac catheterization patients [Lebovic, Reich, Steinberg, Rossi, Vela, Silvay], A956
coronary artery bypass graft surgery, comparative risk versus sufentanil anesthesia in: desflurane anesthesia and myocardial ischemia [Helman, Leung, Bellows, Pineda, Mangano, SPI Research Group], A1124
corrective operations in infants and children with congential heart defects, metabolic effects of [Puhakka, Rasanen, Leijala, Peltola], A965
CPB induces increased leukocyte adhesion receptors but not TNF-a [Rinder, Mathew, Bonan, Hines, Smith], A59
deep hypothermic circulatory arrest, age-related differences in kinetics of deoxygenation during [Steven, Kurth, Phoon, Nicolson, Chance], A969
direct assessment of myocardial retrograde cardioplegia distribution during cardiac surgery [Aronson, Lee, Walker, Wiencek, Feinstein, Bilotta, Karp, Roizen], A68
does anesthetic technique affect hemostasis after cardiac surgery? [Salmenpera, Kuitunen, Hynynen, Heinonen, Fyhrquist], A74
does fiberoptic bundle design affect clinical accuracy of mixedvenous saturation catheters? [Durkan, Turner], A412
effect of mannitol on renal function during coronary artery bypass [Gehr, Gehr, Yoch, Nakatsuka, Wolman], A67
effects of protamine on ACT and antithrombin III-heparin complex during cardiac surgery [Inada, Aoki, Kohama, Aoki, Takanashi, Iwahashi, Furuta], A78
endothelin levels in patients requiring blood pressure reduction following cardiopulmonary bypass [Lawhorn, Nelson, Lonergan, Hudson], A50
fibrin formation during CPB with and without circulatory arrest in operations of congenital heart diseases [Dietrich, Spannagl, Mossinger, Richter], A76
highly elevated plasma histamine during cardiac surgery [Alston], A60
influence of aprotinin on coagulation patterns and blood loss in infants undergoing surgery for congenital heart defects [Mossinger, Dietrich, Spannagel, Jochum, Richter], A77
inhaled nitric oxide in pulmonary hypertension following mitral valve replacement [Girard, Lehot, Clerc, Ffrench, Estanove], A984
is supplemental $\mathrm{O}_{2}$ beneficial to premedicated patients prior to CABG surgery? [Kavanagh, Cheng, Sandler, Lawson, Chung], A104
IV morphine infusion in infants and toddlers following cardiac surgery, respiratory effects of [Lynn, Opheim, Nespeca, Slattery], A952
left ventricular systolic and diastolic function during treatment of post CABG hypertension [Davies, Karski, Teasdale, Ivanov, Young, Weisel], A145
low dose aprotinin or tranexanic acid treatment in cardiac surgery [Isetta, Samat, Kotaiche, Jourdan, Grimaud], A80
neuropsychological change and statistical artifact [Mitzel, Albin, Costello], A1030
new mixed venous saturation catheter in, perioperative evaluation of [Pond, Blessios, Lappas, McCawley], A411
noninvasive monitoring of mixed-venous oxygen saturation in infants by near infrared reflectance spectroscopy [Steven, Kurth, Phoon, Nicolson, Chance], A413
pediatric, cuffed endotracheal tubes for, cause low incidence of postoperative airway problems [Malmros, Fletcher, Jonmaker, Nordstrom], A931
pediatric inpatients undergoing cardiac surgery, ingestion of clear liquids compared with preoperative fasting in [Dorsey, Nicolson, Schreiner], A920
plasma glutamate and aspartate levels during cardiac surgery [Amory, Wagner, Nicklas, Zeevalk], A157
platelet-leukocyte binding on cardiopulmonary bypass [Rinder, Mathew, Bonan, Smith], A58
platelet-rich plasmapheresis during cardiac reoperations [Reich, Koorn, Vitale, DePerio, Silvay], A987
preoperative oral clonidine and reduced anesthetic requirement for CABG surgery [Howie, Hiestand, Romanelli, Harris, Rezaei, McSweeney], A41
prognostic significance of ST segment elevation in CABG surgery [Leung, Hollenberg, Mangano], A84
protein C activation during extracorporeal circulation for cardiac surgery [Ungureanu, Pelissier, Guillemin, Abry, Carpentier], A69
randomized blinded trial of amrinone, epinephrine, and amrinone/epinephrine after cardiopulmonary bypass [Royster, Butterworth, Prielipp, Robertie, Kon], A148
relationship between oxygen delivery and consumption during and following cardiopulmonary bypass [Abrante, Sheikh, Perkins, Raghavan, Samuel, Lumb, Cohen], A66
renal function not influenced by differences in pH -management and pulsatile/non-pulsatile perfusion during CPB [Badner, Murkin, Lok], A65
depth
with combinations of isoflurane, fentanyl, and $\mathrm{N}_{2} \mathrm{O}$, EEG prediction of arousal during [Dutton, Smith, Smith], A448
conscious awareness in general population of anesthetized patients, incidence of [Jordening, Pedersen], A1055
continuous IV dexmedetomidine infusion as anesthetic adjuvant in hysterectomy [Aho, Erkola, Kallio, Scheinin, Kortilia], A308
prediction of, during narcotic induction, with bispectral analysis of EEG [Kearse, Saini, deBros, Chamoun], A175
propofol concentration effects relationships for hypnotics and eyelid reflex [Vuyk, Lemmens, Burm, Vietter, Bovill], A316

## electroconvulsive therapy

effect of, on electrocardiogram and echocardiogram [Messina, Paranicas, Katz, Markowitz, Yao, Devereaux], A440
evaluation, preoperative
are some laboratory assessments more beneficial than others? [Apfelbaum, Gronert, Murray, Grogono, Thisted, Meyer, Rupani, Lichtor, Finn, Schreider, Texidor, Schmittner, Disbrow, White, Duke, Malhotra, Roizen], A898
is anesthetist's knowledge of patient data dependent on who performs evaluation? [Bjoraker], A904
laboratory screening, do asymptomatic individuals benefit from? [Apfelbaum, Roizen, Murray, Grogono, Gronert, Duke, Thisted, Rupani, Texidor, Schmitter, Coalson, Lichton, Finn, Uitvlugt, Malhotra, Disbrow], A1054
prognostic importance of preoperative hypertension [Helman, Browner, Li, Mangano, SPI Research Group], Al10
should urinalysis be required before elective outpatient surgery? are legislators correct? [Apfelbaum, Gronert, Murray, Grogono, Thisted, Duke, Rupani, Malhotra, Coalson, Lichtor, Finn, Roizen, Graham, Kritch], All07
simplified risk scoring system for patients undergoing cardiac surgery [McCarthy, Tuman, Corey, Ivankovich], A114
neurosurgical
capnography for monitoring hyperventilation of head injury patients [Liu, Leighton, Caron, McBride, Bongard], A249
deep venous thrombosis prophylaxis by low molecular weight heparin [Melon, Keravel, Gaston, Huet, Combes, Neuronox Group], A214
effect of anesthetic agents on transcranial magnetic motor evoked potentials in patients [Losasso, Boudreaux, Muzzi, Cucchiara, Daube], A1032
effect of desflurane and isoflurane with $\mathrm{N}_{2} \mathrm{O}$ on cerebrospinal fluid pressure in patients with supratentorial mass lesions [Muzzi, Daltner, Losasso, Weglinski, Milde], A167
hemodynamic manipulations during,: arterial pulse contour analysis trending of cardiac output [Weissman, Ornstein, Young], A469
hypertonic, hyperoncotic hydroxyethyl starch decreases intracranial pressure following neuro trauma [Weinstabl, Mayer, Germann, Steltzer, Hammerle], A201
pharmacokinetic comparison during and after infusion for, sufentanil versus fentanyl [Artru, Levron, Charlot, Le Moing, Chacornac], A324
postoperative hyperdynamic cardiovascular response following intracranial excision of arterial venous malformation [Porembka, Ebrahim, Bloomfield, Stuebing], A215
propofol versus morphine and barbiturates, in sedation of patients with severe head injury [Pearson, Kruse, Demetrion], A248
protein catabolism in, urea and total urinary nitrogen as measures of [Hyman, Naukam, Flakoll], A264
relationship between end-tidal and arterial carbon dioxide in neurointensive care patients [Russell, Graybeal], Al97
thiopental loading and hypothermic circulatory arrest for complex cerebral artery aneurysm surgery [Stone, Young, Solomon, Smith, Ostapkovich], A54
urapidil increases intracranial pressure in head trauma patients [Germann, Weinstabl, Mayer, Krafft, Hammerle], A247

## obstetric

$0.0625 \%$ bupivacaine $0.0002 \%$ fentanyl via patient-controlled epidural analgesia for pain of labor and delivery [Ferrante, Barber, Segal, Hughes, Datta], A737
anesthesia personnel, neonatal resuscitation, and courts [Heyman, Joseph, Salem, Heyman], A1074
antiemetic efficacy of prophylactic metoclopramide for cesarean delivery [Lussos, Bader, Thornhill, Datta], A1081
cesarean delivery under regional anesthesia, assessment of electrocardiographic and echocardiographic changes during [Utterback, James, Chen, Geiser], AI080
cesarean section, propofol as induction and maintenance agent for: maternal and neonatal effects [Richardson, Abboud, Zhu, Donovan, Peres da Silva, Song, Gottschling, Homyak, Houpt, Yakal, Rogers], A1078
cesarean section, ST-segment changes during [Zakowski. Goldstein, Ramanathan, Turndorf], A1079
coagulation studies in parturient: how do we practice? [Voulgaropoulos, Palmer], A1073
combination of low dose epidural morphine and intramuscular diclofenac sodium for postcesarean analgesia [Sun, Wu, Lin, Chang, Mok], A745
continuous epidural analgesia post-C/S: effect of diluent volume [Cohen, Amar, Pantuck, Pantuck, Landa, Widroff], A860
desflurane analgesia in: maternal and neonatal effects [Swart, Abboud, Zhu, Donovan, Peres da-Silva, Justice, Schaefer, Smith, Toliver, Skeen, Yakal, Rogers], A844
effect of epidural butorphanol and fentanyi on shivering during C-section [Chen, Kwan], A843
epidural analgesia for labor, maternal temperature regulation during [Hortvet, Camann, Hughes, Bader, Datta], A849
epidural clonidine, following cesarean section: effect of prior local anesthetic [Huntoon, Eisenach, Boese], A855
epidural fentanyl and sufentanil with bupivacaine and neonatal effects [Loftus, Hill, Cohen], A856
epidural fentanyl does not worsen post-cesarean section analgesia when administered before epidural morphine [Vincent, Chestnut, Choi, Coffin, Ostman, Bates, Laszewski], A861
epidural fentanyl-bupivacaine for cesarean section, placental transfer and neonatal effects of [Bang, Helbo-Hansen, Lindholm, Klitgaard], A847
epidural versus intravenous butorphanol for post-cesarean delivery analgesia [Loferski, Camann, Stone, Datta], A848
epidural with bupivacaine-epinephrine mixture, maternal and fetal catecholamine levels following [Weinberg, Zakowski, Ramanathan], A846
incidence of postdural puncture headache in obstetrical patients: comparing 24 -gauge and 22 -gauge Sprotte needles [Leeman, Sears, O'Donnell, Reisner, Jassy, Harmon, O'Donnell, Kelleher, Stanos], A853
intrathecal fentanyl does not improve intrathecal morphine analgesia after cesarean section [Boerner, Norris, Leighton, Arkoosh, Torjman], A858
intrathecal fentanyl for labor analgesia [Zakowski, Goldstein, Ramanathan, Turndorf], A840
intrathecal labor analgesia, comparison of fentanyl, meperidine, and sufentanil for [Honet, Arkoosh, Huffnagle, Norris, Leighton], A839
intrathecal sufentanil and fentanyl for labor analgesia, comparison between [Sharkey, Arkoosh, Norris, Honet, Leighton], A841
intrathecal sufentanil/tetracaine for cesarean section surgery [Pan, Mok], A743
metoclopramide: analgesic adjunct for labor-like pain [Rosenblatt, Saberski, Sinatra, Cioffi], A675
patient-controlled epidural analgesia during labor, doubleblind patient evaluation of [Price, Fontenot, Weinger, Reisner, Henry], A836
serum CK and CK-MB levels in cesarean section patients [Ross, Conrad, Mitruka, Baker], A862
spinal anesthesia for postpartum tubal ligation: meperidine versus lidocaine [Honet, Costello, Norris, Arkoosh, Leighton], A859
spinal catheter does not reduce post-spinal headache after cesarean section [Blaise, Cournoyer, Perrauly, Bedard, Petit, Landry], A857
sufentanil: epidural administration during labor and delivery, maternal and neonatal plasma levels after [Kick, Vertommen, van Aken, GrySeels], A837
unilateral blockade during labor epidural analgesia, risk factors associated with [Langeron, Hamza, Narchi, Lecoq, Smida], A832
ophthalmologic
bilateral infraorbital block with $0.05 \%$ bupivacaine in children [Nicodemus, Ferrer, Cristobal, de Castro], A690
effects of propofol sedation for ophthalmic nerve blocks [Beatie, Stead], A28
effects of single bolus dose of propofol and methohexital in eye surgery patients [Moorthy, Dierdorf, Reddy, Mattice, Yee], A39
retrobulbar nerve blocks, current anesthesia practice and training in [Lubenow, Deutsch, Narbone, Ivankovich], A885
strabismus operations on outpatient basis, comparison of lorazepam to droperidol as antiemetic in children undergoing [Khalil, Berry, Howard, Hanis, Mazow], A958
topical, proparacaine for, reduction of pain from initial application of [Brady, Robinson, Hustead, Becker], A678

## orthopedic

analgesia following arthroscopic knee surgery, comparison of intra-articular bupivacaine and morphine for [Dickstein, Raja, Johnson], A767
arthroscopic knee surgery, efficacy of intra-articular morphine or bupivacaine following [Heard, Edwards, Ferrari, Hanna, Willock], A670
comparison of analgesia after major surgery: transdermal fentanyl delivery system versus morphine IM [Boerner, Bell, Bartkowski, Torjman, Lessin, Marr], A709
continuous postoperative epidural infusion of $0.25 \%$ bupivacaine with or without opiates, unpredictability of sensory level regression during [Ferrante, Fanciullo, Kistler, Katz, Concepcion], A750
hemodynamic changes during cemented non-hinged total knee prosthesis insertion: influence of tourniquet utilization [Paugam, Gentil, Chandon, Debaene, Augereau, Lienhart], A165
hemodynamic effects of pneumatic tourniquet in patients with and without cardiovascular disease [Fahmy, Patel, Sunder], A905
hip arthoplasty, methylmetacrylate blood levels during [Gentil, Paugam, Wolf, Augereau, Lienhart], A288
increased homologous blood requirement after isovolemic hemodilution with $6 \%$ hydroxyethyl starch during elective total hip replacement [Singelyn, Gouverneur]; A73
local, effects of, after outpatient arthroscopy [Smith, Shively, White], A667
pediatric scoliosis surgery, nurse-controlled versus patient-controlled analgesia following [Weldon, Connor, White], A935
pneumatic tourniquet, effects of, on circulatory variables, plasma catecholamines and renin activity [Fahmy], A251
preoperative use of erythropoietin in adolescents undergoing scoliosis surgery: hematologic and cardiovascular and side effects [Rothstein, Roye, Verdisco], A959
respiratory effects of fentanyl transdermal delivery system compared to fixed interval IM morphine following spinal surgery [Torjman, Bartkowski, Marr, Lessin, Boerner], All01
route of PCA affects incidence of urinary retention following surgery [Prados, Renfroe], A751
spinal, with 27 -gauge needles for outpatient knee arthroscopy in patients 12 to 18 years old [Kang, Romeyn, Shenton, Tompkins, Furlano], A1103
total hip arthoplasty, cemented versus noncemented, greater embolic echogenesis in [Weber, Ereth, Abel], A390
total knee and hip arthroplasty, perioperative mortality follow-ing-role of anesthesia care? [Sharrock], A868
otolaryngologic
individuality of breathing patterns during hypoxia and exercise [Eisele, Wuyam, Benchetrit, Savouray, Bittel], Al100
pharyngoplasty in children, anesthetic morbidity associated with: five year review [Halpern, Roy], A933

## outpatient

anesthetic morbidity in congenital heart disease patients undergoing surgery [Strafford, Henderson], A866
atracurium versus vecuronium, comparison of effects of [Zahl, Wetchler, Kallar, Bogetz], Al106
automated computer-assisted anesthesia interview for [Stead, Trentalange], A489
cardiovascular effects of desflurane in [Fletcher, Sebel, Murphy, Smith, Flister, Mick], A140
computerized preanesthetic evaluation system, disease descriptors for [Jackson, Gibby, Gravenstein, Paulus], A495
desflurane versus propofol for laparoscopic surgery [Kallar, Everett], Al0
desflurane versus propofol for outpatient laparoscopy [Thirion, Clergue, Seebacher], A18
desflurane versus propofol for [Smith, Van Hemelrijck, White], A13
effect of intraoperative ketoralac on recovery after laparoscopy [DeLucia, White], Al4
effect of ketorolac on postoperative narcotic requirements of gynecological surgery outpatients [Prados, Blaylock], A6
effect of ondansetron on recovery time, sedation level and discharge from ambulatory surgery [Kovac, Steer, Hutchison, Calkins, Joslyn], A7
failure of ketorolac to prevent severe postoperative pain following laparoscopy [Pandit, Kothary Lebendom-Mansour, Levy, Randel, Mathai], A33
hemodynamic effects and postoperative respiratory depression of fentanyl, sufentanil, alfentanil, and nalbuphine [Cheng, Chapman, Chung, Ong, Romanelli], A24
is coloscopic preparation with oral polyethyleneglycol 2 hours before general anesthesia safe in ambulatory patients? [Mahiou, Narchi, Gory, Veyrac, Germond, Bazin], Al108
is desflurane superior to propofol for outpatient anesthesia? [Lebenbom-Mansour, Pandit, Kothary, Randel, Levy], A19
ketorolac superior to sufentanil, giving longer pain relief with less nausea and less recovery time after laparoscopy [Bellamy, Chovan, Brose, Gunzenhauser], A29
ketorolac versus fentanyl analgesia for operations with local anesthesia [Bosek], A762
local, effects of, after outpatient arthroscopy [Smith, Shively, White], A667
long propofol infusion versus isoflurane for ambulatory surgery, recovery and discharge after [Valanne, Kortila], A15
oral midazolam premedication in pediatric day surgery, efficacy and feasibility of [McMillan, Spahr-Schopfer, Sikich, Hartley], A27
PADS-A discriminative discharge index for ambulatory surgery [Chung, Ong, Seyone, Mati, Chan], Al105
preoperative assessment clinic reduces day surgery cancellations [Maccarthur, Maccarthur, Bevan, Steeves], All 109
propofol-nitrous oxide versus halothane/isoflurane-nitrous oxide in pediatric outpatient surgery [Martin, Bargas, Nicolson, Chan, Seidl-Freidman, Tifanny], A970
psychomotor effects of IV ondansetron in female outpatients [Pearson, From, Ostman, Demetrion, Anderson, Forbes, Joslyn], A8
quality assurance analysis of unanticipated admissions following ambulatory surgery-the "New York experience" [Twersky, Greenberg, Levine], A26
recovery and discharge times following propofol; thiopental, and halothane, in pediatric outpatients [Hannallah, Schafer, Britton, Norden, Patel], A25
should urinalysis be required before elective outpatient surgery? are legislators correct? [Apfelbaum, Gronert, Murray, Grogono, Thisted, Duke, Rupani, Malhotra, Coalson, Lichtor, Finn, Roizen, Graham, Kritch], A1107
spinal anesthesia with 27 -gauge needles for outpatient knee arthroscopy in patients 12 to 18 years old [Kang, Romeyn, Shenton, Tompkins, Furlano], All 103
Sprotte versus Qunicke tip needles in, randomized comparison of [Broome, Schapiro], A1 104
strabismus operations on outpatient basis, comparison of lorazepam to droperidol as antiemetic in children undergoing [Khalil, Berry, Howard, Hanis, Mazow], A958
surgical, postoperative mood assessment in, impact of vomiting and pain [Young, Kitz, Conahan, Aukburg, Lecky], A5
surgical, sustained release prochlorperazine for prevention of nausea and vomiting in [Young, Kitz, Conahan, Aukburg, Lecky], A4

## pediatric

airway device selection with body length tape measure [Hinkle, Arnold], A402
airway pressure release ventilation, optimal release time during [Martin, Wetzel], A263
amputation, incidence of phantom sensation and pain in [Krane, Heller, Pomietto], A691
amrinone in children after Fontan procedure for repair of complex cyanotic congenital heart disease, hemodynamic effects of [Sorensen, Lynn, Stevenson, French], A.961
anesthesia personnel, neonatal resuscitation, and courts [Heyman, Joseph, Salem, Heyman], A1074
antiemetic in children undergoing strabismus operations on outpatient basis, comparison of lorazepam to droperidol as [Khalil, Berry, Howard, Hanis, Mazow], A958
axillary brachial plexus block for emergency procedures in young children [Tryba, Haensch, Zenz], A757
bilateral infraorbital block with $0.05 \%$ bupivacaine [Nicodemus, Ferrer, Cristobal, de Castro], A690
body temperature in pediatric patients, effect of lower limb tourniquet on [Ginsberg, Bloch, Binner], A957
cardiac surgery, cuffed endotracheal tubes for, cause low incidence of postoperative airway problems [Malmros, Fletcher, Jonmaker, Nordstrom], A931
caudal: a survey [Gunter], A936
children, anesthetic morbidity associated with pharyngoplasty in: five year review [Halpern, Roy], A933
children, caudal fentanyl-bupivacaine for analgesia in [Campbell, Yentis, Fear, Bissonnette], A939
children, continuous infusion of low-dose morphine for postoperative analgesia in [Taylor, Boswell], A937
children, safety of oral midazolam premedication for [SpahrSchopfer, McMillan, Sikich, Hartley, Lerman], A921
children anesthetized with halothane, dose response of ORG 9426 in [Bikhazi, Marin, Mouhanna, Halliday, Foldes], A1067
children labeled as "malignant hyperthermia susceptible,"perioperative course of [Yentis, Hartley], A870
in children using double mask system, reduced exposure to halothane and nitrous oxide by operating personnel during induction of [Weber, Unterberger, Gangoly], A927
coagulation defects in neonates during CPB [Kern, Morana, Sears, Hickey], A63
colorimetric end-tidal carbon dioxide detector in children, validation of [Kelly, Wilhoit, Brown, Case], A946
comparison of ketorolac and morphine when used during pediatric surgery [Watcha, Jones, Schweiger, Lagueruela, White], A942
comparison of propofol to ketamine for, in pediatric cardiac catheterization patients [Lebovic, Reich, Steinberg, Rossi, Vela, Silvay], A956
corrective operations in infants and children with congential heart defects, metabolic effects of [Puhakka, Rasanen, Leijala, Peltola], A965
cytokine elevation in children with sepsis syndrome and ARDS [Costarino, Sullivan, Harris, Kilpatrick], A245
desflurane in: maintenance and emergence characteristics [Dinner, Embree, Sharp, Damask], A929
difficult intubation in newborns and infants using ultra thin fiberoptic bronchoscope [Monrigal, Granry, Le Rolle, Rod, Cavellat], A1044
do small children have limited adrenocortical response to ACTH during abdominal surgery? [Wolf, Eyres, Laussen], A948
double-burst characteristics of muscle relaxants in children [Crawford, Bissonnette], A811
droperidol and vomiting after strabismus repair, P6 acupuncture [Yentis, Bissonnette], A3
effect of brain reperfusion strategy on cerebral blood flow and metabolism after total circulatory arrest in children [Greeley, Mault, Baldwin, Stockwell, Reves, Ungerleider], A966
effect of intranasal midazolam on memory in pediatric patients [Twersky, Hartung, McClain, Berger, Beaton], A919
effects of disease on protein binding [Stiller, Davis, Cook, McGowan], A963
endotracheal tubes, pressure support ventilation to decrease work of breathing imposed by [Gullahorn, Banner, Berman], A256
epidural morphine with butorphanol in [Lawhorn, Brown], A940
former premature infant, comparison of spinal and general anesthesia in [Krane, Haberkern, Jacobson], A912
former preterm infants, single-dose and continuous microcatheter spinal anesthesia in [McDonald, Berkowitz, Santini, Alverio], A911
glycopyrrolate in children, pharmacokinetics of [Kanto, Rautakorpi, Ali-Melkkila, Iisalo, Kaila], A353
infant apnea detection after herniorrhaphy [Bell, Dubose, Seashore, Touloukian, Oh, Hughes], A1047
infants, new endotracheal tube connector for sampling endtidal $\mathrm{CO}_{2}$ in [Halpern, Bissonnette], A930
infants, optimal agent for inguinal herniorrhaphy in: spinal lidocaine [Sukhani, Ramamoorthy, Wahood, Black], A914
infants and children, concurrent validation of objective pain scale for [Norden, Hannallah, Getson, O'Donnell, Kelliher, Walker], A934
infants and children, estimating distance from skin to lumbar epidural space in [Ikemura, Yamashita], A943
infants revisited, cricoid pressure in [Moynihan, Brock-Utne], A932
influence of aprotinin on coagulation patterns and blood loss in infants undergoing surgery for congenital heart defects [Mossinger, Dietrich, Spannagel, Jochum, Richter], A77
initial experience of switchover from halothane to sevoflurane in [Miyasaka, Muto, Takata, Sakai, Kondo, Sun], A1048
inpatients undergoing cardiac surgery, ingestion of clear liquids compared with preoperative fasting in [Dorsey, Nicolson, Schreiner], A920
intranasal phenylephrine in children, clinical effects of pharmacokinetics of [Christensen, Armstead, Bilyu, Johnson, Friesen], A967
ischemia and reperfusion in newborn heart: effect of glucose [McGowan, Downing], A1046
IV morphine infusion in infants and toddlers following cardiac surgery, respiratory effects of [Lynn, Opheim, Nespeca, Slattery], A952
methohexital requirements for IV induction of [Westrin], A960
morphine versus fentanyl: epidural opiates for postoperative pain relief in [Lejus, Roussiere, Testa, Ganansia, Ricard], A941
newborn, epidural in, lidocaine and bupivacaine plasma levels after [Rochette, Beauvoir, Desh, Biboulet, d'Athis], A917
nitrous oxide does not increase vomiting in children [Splinter, Roberts, Rhine, MacNeill, Gould, Menard, Navaneelan, Komocar], A949
oral midazolam premedication in day surgery, efficacy and feasibility of [McMillan, Spahr-Schopfer, Sikich, Hartley], A27
oral transmucosal fentanyl citrate for procedures in children, safety and efficacy of [Conard, Rosenblum, Weisman, Schecter, Bartolotta, Altman, Quinn], A954
ORG 9426 infusion requirements in children during halothane anesthesia [Brandom, Woelfel, Sarner, Cook], A1072
parents' response to observing anesthesia induction in their children [Honig, Maguire, Hannallah], A1051
patient-controlled analgesia with morphine versus meperidine [Vetter], A692
perioperative use of three hydrating solutions in children, blood glucose and electrolyte changes following [Dubois, Gouyet, Murat, Saint-Maurice], A945
pharmacokinetics of ketamine in [Malinovsky, Servin, Lepage, Cozian, Pinaud], A351
postoperative apnea in infants, observation of [Naylor, Radharkrishnan, Thisted, McLaughlin], A955
postoperative CPK levels in healthy pediatric patients [Kerkar, Dhandha, Jewell], A950
postoperative management of anti-reflux surgery, comparison of epidural opioids and intravenous opioids in [McNeely], A689
postoperative pain in infants, objective index of: EEG spectral activity [Meyer, Jayais, Bensouda, Mayer, Barrier], A1026
premature infants undergoing inguinal hernia repair, continuous caudal anesthesia with 2-chloroprocaine for [Henderson, Sethna, Berde], A916
preoperative assessment clinic reduces day surgery cancellations [Maccarthur, Maccarthur, Bevan, Steeves], Al109
propofol for induction and maintenance of: comparative study [Halpern, Crawford, Sloan, Sikich, Bissonnette, Lerman], A962
propofol for prevention of chemotherapy-induced nausea and vomiting in pediatric cancer patients [Scher, McDowall, Barst], A1050
propofol in: effect of dose and age [Blackstock, Steward], A924
propofol-nitrous oxide versus halothane/isoflurane-nitrous oxide in pediatric outpatient surgery [Martin, Bargas, Nicolson, Chan, Seidl-Freidman, Tifanny], A970
prospective study in 270 children: effects of $p \mathrm{H}$-adjustment and warming of bupivacaine on onset and duration of epidural anesthesia [Mansoor, Dalens], A938
real and false positive capnography and pulse oximetry alarms during; incidence of [Rolf, Cote], A476
recovery and discharge times following propofol, thiopental, and halothane [Hannallah, Schafer, Britton, Norden, Patel], A25
recovery characteristics following propofol induction and maintenance anesthesia in children [Halpern, Crawford, Sloan, Sikich, Bissonnette, Lerman], A16
reflex sympathetic dystrophy in: follow-up of 70 patients [Wilder, Berde, Wolohan, Micheli, Vieyra], A693
regional, in children, insulin response during [Gouyet, Dubois, Murat, Saint-Maurice], A944
respiratory pattern and function in neonate, effect of branchedchain amino acid supplementation on [Blazer, Reinersman, Askanazi, Hollinger, Kvetan, Katz, Fleischman], A1093
reversal of deep neuromuscular blockade with $40 \mu \mathrm{~g} / \mathrm{kg}$ versus $70 \mu \mathrm{~g} / \mathrm{kg}$ neostigmine in infants and children [Bires, McGregor], A964
scoliosis surgery, nurse-controlled uersusatient-controlled analgesia following [Weldon, Connor: White], A935
spinal anesthesias in newborns: bupivacaine plasma concentrations [Beauvoir, Rochette. Desh. Galy, d'Athis], A968
spinals without supplement: in search of optimal drug and dose [Ramamoorthy, Sukhani, Black]. A915
thoracic epidural anesthesia via caudal approach in children [Gunter, Eng], A10 49
transesophageal echo: evaluation of feasibility and utility in 129 examinations [Sorensen, Stevenson], A391
transmucosal midazolam for preinduction of: comparison of intranasal and sublingual routes [Karl, Larach, Ruffle], A922
transtracheal Doppler in, effects of growth on measurements [Saeki, Namba, Nakayama, Tokioka, Morita, Hirakawa], A459
unpremedicated children, does general anesthesia produce retrograde amnesia in? [Halpern, Lerman], A928
vecuronium priming in children: optimal dose and priming interval [Woloszczuk-Gebicka, Forestner, Furman], A951
in young children, pharmacokinetics of intranasal and intravenous midazolam [Delaunay, Murat, Rey, Pons, SaintMaurice], A923
scheduling
does regional anesthesia significantly delay surgery? retrospective study [Nichols, Nagel, Gantt], A884

## thoracic

continuous epidural analgesia versus intravenous patient controlled analgesia: vital capacity after thoracotomy [Vanhoorebeeck, Vertommen, Van Aken, Vandermeersch], A116
epidural fentanyl after thoracotomy, shorter hospital stay with [Guinard, Mavrocordatos, Cuttat, Chiolero], A698
epidural fentanyl and PCA morphine in post-thoracotomy pain, double-blind comparison of [Benzon, Wong, Belavic, Locicero], A712
isoflurane, direct measurement of effects of, on hypoxic pulmonary vasoconstriction during one-lung-ventilation [Groh, Kuhnle, Kubler, Goetz, Peter], A341
operative lung CPAP with univent bronchial blocker tube [Benumof, Gaughan, Ozaki], A120
posthoracotomy pain relief: does technique really make a difference? [Miguel, Hubbell], A1091
stress response after thoracotomy: intravenous versus epidural fentanyl [Mavrocordatos, Guinard, Chiolero], A697
urologic
patient-controlled analgesia for extracorporeal renal shock wave lithotripsy: prospective study [Levin, Amory, Kortis, Wagner, Pollak], A713
post-anesthesia care unit stay following TURP: should tetracaine spinal be abandoned? [Mychaskiw, Chung, O'Connor, Perlstein], A890
transurethral balloon dilation, new anesthetic technique for, initial results with prostatic block [Belani, Reddy], A731
Anesthesia circuits. See under Equipment
Anesthesia machines. See under Equipment
Anesthesia masks. See under Equipment
Anesthesiologists. See also under Personnel
abilities of, to recognize musical alarm tones, evaluation of [Block], A497
abstracts presented at anesthesia meetings: here today and gone tomorrow? [Campbell, Yentis, Lerman], A886
administering anesthesia, analysis of,: additional objective measures [Herndon, Weinger, Paulus, Zornow, Gaba], A487
anesthesia crisis resource management training [Gaba, Howard, Fish, Yang, Sarnquist], A1062
anesthetic critical incidents analyzed using cognitive science techniques [Cook, Woods, McDonald], A865
do not resuscitate orders and, survey on [Clemency], A888
do not resuscitate orders in presurgical patient: study of U.S. Anesthesiology Department Policies [Rothenberg, Franklin, Ivankovich, McCarthy], A907
Hawthorne effect in anesthesiology practice [Downs, Hodges], A882
opinions and concerns of, survey of: DNR orders in operating room [Boyd, Boudreaux], A900
physician agreement in judging clinical performance [Posner, Caplan, Cheney], A1058
quality assurance data obtained from every anesthetic with - self-completed check-off data sheet [Palmer, Tinnell, Berman, Jones, Gibbs], A909
radiation exposure of [Henderson, Lu, Rockoff, Strauss, Treves], A896
relative importance of factors used to select residents: national survey [Frankville, Benumof], A876
special qualifications for, in practicing pain management [Korevaar, Arbittier], A764
urine drug testing in anesthesia, advance for: norfentanyl is detectable in urine for 48 hours [Silverstein, Reiders, McMullin, Schulman, Zahl], A895
Anesthetic potency. See Potency, anesthetic
Anesthetics. See under Measurement techniques
Anesthetics, gases
nitrous oxide
as cerebral vasodilator? [Lu, Gibson, Monell, Frost, Goldiner], A539
comparison of, with subanesthetic xenon: analgesic and psychomotor effects [Yagi, Mashimo, Kawaguchi, Pak, Yoshiya], A342
comparison of sevoflurane- $\mathrm{N}_{2} \mathrm{O}$ and propofol-isoflurane $-\mathrm{N}_{2} \mathrm{O}$ [Smith, Ding, White], A344
does not increase vomiting in children [Splinter, Roberts, Rhine, MacNeill, Gould, Menard, Navaneelan, Komocar], A949
effect of, on cortical magnetic motor evoked potentials [Sloan, Levin], A450
effect of, on surgical conditions during laparoscopic cholecystectomy [Taylor, Feinstein, Soper, White], A330
more potent cerebrovasodilator than isoflurane in humans [Lam, Slee, Cooper, Bachenbert, Mathisen], A168
subanesthetic concentrations of isoflurane and, learning and responsiveness at [Dwyer, Bennett, Eger], A334

## xenon

comparison of, with nitrous oxide: analgesic and psychomotor effects [Yagi, Mashimo, Kawaguchi, Pak, Yoshiya], A342

## Anesthetics, intravenous

## alfentanil

acute tolerance with, evidence for rapid onset of [Hiestand, Howie, Romaneli, Jopling, Rezaei, McSweeney], A322
administered by multiple bolus and continuous infusion in presence of either nitrous oxide or propofol, pharmacokinetics of [Avram, Sanghvi, Henthorn, Fragen, Asada, Pemberton, Correll, Minieka], A320
cerebral hemodynamic and metabolic response to, in humans [Slee, Lam, Winn, Laohaprasit], Al71
cerebral microvascular effects of, in piglets [Monitto, Kurth], A542
desflurane versus, for outpatient laparoscopy [Pavlin, Kallar, Everett, Hautman, Rapp, Luke, Lecky], A11
gastric fluid concentrations of, following infusion of [Prasloski, Parsons], A318
infusion of, prediction of plasma concentrations during: accuracy of different pharmacokinetic models, in volunteers [Barvais, Cantraine, d'Hollander, Coussaert], A319
inotropic effect of, [Martin, Lin, Lee, Lee], A514
negative inotropic effects of propofol and midazolam not potentiated by, in perfused isolated rat hearts [Rouge, Ouhayoun, Gantet, Ewquerre, Cathala], A513
predication of plasma concentrations of midazolam and, accuracy of, in coronary surgery [Barvais, d'Hollander, Ganghi, Sylinn], A40
diazepam
effect of, on antinociceptive actions of GABAA $_{A}$ agonists in spinal cord of rat [Howard, Hammond], A579

## etomidate

effect of, on intercellular communications between astrocytes [Mantz, Cordier, Desmonts, Giaume], A581
effect of, on motor evoked responses to transcranial electrical or magnetic stimulation in humans [Kalkman, Drummond, Ribberink, Patel, Sano, Bickfor], A1024
growth of staphylococcus aureus in [Sosis, Braverman, Villaflor], A439
interaction of dexmedetomidine and, in chronically instrumented dogs [Proctor, Schmeling, Kampine, Warltier], A558
modulation of central GABAA-receptor gated current [Yang], A578
produces vasodilation by mixed endothelium-dependent and independent mechanisms [Dozaki, Chang, Davis], A537
propofol versus,: anesthesia for carotid endarterectomy [Paillot, Van Hemelrijck, Van Aken], A180
reduced side-effects of, with new solvent 2-hydroxypropyl-Bcyclodextrin [Doenicke, Angster, Beger-Hintzen, Vollmann, Nebauer], A381
fentanyl
cerebral microvascular effects of, in piglets [Monitto, Kurth], A542
effect of, on motor evoked responses to transcranial electrical or magnetic stimulation in humans [Kalkman, Drummond, Ribberink, Patel, Sano, Bickfor], A1024
effect of, on neurogenic motor evoked potentials recorded at spinal and sciatic level [Peterson, Mongan], A179
high-dose, regional EEG response to induction of, evaluated by new brain function monitoring system [Ochiai, Koitabashi, Toyoda, Fukushima], A445
influence of pharmacokinetic variability on pharmacologic response [Williams, Smith, Jacobs], A48
inotropic effect of, [Martin, Lin, Lee, Lee], A514
propofol with [Glass, Dyar, Jhaveri, Goodman, Goodale], A44
sufentanil versus,: pharmacokinetic comparison during and after infusion for neurosurgical anesthesia [Artru, Levron, Charlot, Le Moing, Chacornac], A324
ketamine
action of, on cloned potassium channels using voltage clamp techniques, molecular basis of [Kulkarni, Bayley, Anantharam, Treistman], A383
bronchodilatation by, reinvestigation of mechanism of [BenHarai, Bansinath], A627
comparison of propofol and, for anesthesia in pediatric cardiac catheterization patients [Lebovic, Reich, Steinberg, Rossi, Vela, Silvay], A956
differential effects of, on respiratory muscles of larynx in dogs [Iwasaki, Namiki, Omomte, Yamakage, Yamasawa], All5
differential response of proximal and distal coronary arteries to [Coughlan, Flynn, Bosnjak, Kampine, Warltier], A535
effect of, on intercellular communications between astrocytes [Mantz, Cordier, Desmonts, Giaume], A581
effect of, on neurogenic motor evoked potentials recorded at spinal and sciatic level [Peterson, Mongan], A179
effect of duration of, on pulmonary acid injury [Coleman, Rutter, Tait, Johnson, Knight], A998
improves outcome from incomplete cerebral ischemia, in rats [Hoffman, Pelligrino, Albrecht], A605
interaction of dexmedetomidine and, in chronically instrumented dogs [Proctor, Schmeling, Kampine, Warltier], A558
liver microsomal metabolism of, stereochemical aspects of, in human [Kharasch, Kunze, Herrmann], A382
metabolism of, as probe for dexmedetomidine effects on human drug biotransformation [Kharasch], A311
myoglobinemia induced by succinylcholine effectively reduced by [Noguchi, Amamiya, Andou, Sankawa], A299
neurotoxicity, chlorbutanol is responsible for, in rabbits [Malinovsky, Lepage, Mussini, Cozian, Pinaud], A650
pharmacokinetics of, in children [Malinovsky, Servin, Lepage, Cozian, Pinaud], A351
protective effect of, following closed cranial impact in rats [Shapira, Artru, Lam], A203
slow blockade of NMDA channels by [Orser, MacDonald], A1033

## methohexital

EEG effects of, compared to propofol [Reddy, Moorthy, Mattice, Dierdorf, Dietsch], A182
growth of staphylococcus aureus in [Sosis, Braverman, Villaflor], A439
reduces depolarization-induced calcium entry into cultured rat hippocampal neurons [Bleakman, Jones, Roback, Hornberger, Radke, Miller, Harrison], A583
requirements, for IV induction of anesthesia in children [Westrin], A960
single bolus dose of propofol and, effects of, in eye surgery patients [Moorthy, Dierdorf, Reddy, Mattice, Yee], A39

## midazolam

comparison of propofol and, for colonoscopy [Rosenblum, Ritter, Starsnic, Azad, Torjman, Seltzer, Marks], A31
effect of, on motor evoked responses to transcranial electrical or magnetic stimulation in humans [Kalkman, Drummond, Ribberink, Patel, Sano, Bickfor], A1024
effect of, on transcranial magnetic motor evoked potentials in neurosurgical patients [Losasso, Boudreaux, Muzzi, Cucchiara, Daube], A1032
negative inotropic effects of, not potentiated by alfentanil, in perfused isolated rat hearts [Rouge, Ouhayoun, Gantet, Ewquerre, Cathala], A513
predication of plasma concentrations of alfentanil and, accuracy of, in coronary surgery [Barvais, d'Hollander, Ganghi, Sylinn], A40
propofol versus, for prolonged sedation in ICU [Geller, Weinbroum, Sorkine, Silbiger, Halpern], A269

## pentobarbital

differential effects of, on brain C-fos and jun-B messenger RNA [Marota, Crosby, Uhl], A647
differential effects of, on sodium channels derived from nerve and muscle [Wartenberg, Wange, Urban, Duch], A1036
effect of, on antinociceptive actions of GABAA agonists in spinal cord of rat [Howard, Hammond], A579
propofol
age versus, pharmacokinetics of [Dyck, Varvel, Hung, Shafer], A315
alfentanil administered by multiple bolus and continuous infusion in presence of, pharmacokinetics of [Avram, Sanghvi, Henthorn, Fragen, Asada, Pemberton, Correll, Minieka], A320
amnesia produced by, cognitive mechanism of [Reinsel, Veselis, Marino, Wronski], A185
arterial compliance increase induced by, accounts for systolic arterial pressure decrease [Dupuy, Schurando, Payen], A144
autonomic reflexes caused by, surgical stimulation significantly reduces depression of [Latson, Wiley, O'Flaherty], A85
barbiturates and: depression of nociceptive neurotransmission in spinal cord [Jewett, Tarasiuk, Gibbs, Kendig], A589
comparison of desflurane with, in outpatients undergoing peripheral orthopedic surgery [Rapp, Conahan, Pavlin, Levy, Hautman, Luke, Lecky], A12
comparison of ketamine and, for anesthesia in pediatric cardiac catheterization patients [Lebovic, Reich, Steinberg, Rossi, Vela, Silvay], A956
comparison of midazolam and, for colonoscopy [Rosenblum, Ritter, Starsnic, Azad, Torjman, Seltzer, Marks], A31
comparison of sevoflurane- $\mathrm{N}_{2} \mathrm{O}$ and propofol-isoflurane- $\mathrm{N}_{2} \mathrm{O}$ [Smith, Ding, White], A344
computer-controlled infusion of,: comparison of three pharmacokinetic models [Viviand, Guidon-Attali, Lacarelle, Borsarelli, Francois], A313
concentration of, effects relationships for hypnotics and eyelid reflex [Vuyk, Lemmens, Burm, Vietter, Bovill], A316
desflurane versus, for outpatient anesthesia [Smith, Van Hemelrijck, White], A13
desflurane versus, for outpatient laparoscopic surgery [Kallar, Everett], A10
desflurane versus, for outpatient laparoscopy [Thirion, Clergue, Seebacher], A18
differential response of proximal and distal coronary arteries to [Coughlan, Flynn, Bosnjak, Kampine, Warltier], A535
direct cardiac effects of, in situ canine hearts [Ismail, Kim, Salem, Crystal], A510
EEG effects of, compared to methohexital [Reddy, Moorthy, Mattice, Dierdorf, Dietsch], A182
effect of, on motor evoked responses to transcranial electrical or magnetic stimulation in humans [Kalkman, Drummond, Ribberink, Patel, Sano, Bickfor], A1024
effect of, on neurogenic motor evoked potentials recorded at spinal and sciatic level [Peterson, Mongan], A179
effect of, on transcranial magnetic motor evoked potentials in neurosurgical patients [Losasso, Boudreaux, Muzzi, Cucchiara, Daube], A1032
endothelium-independent vasodilation produced by, and as calcium channel blocker [Chang, Lacy, Davis], A536
epileptiform electroencephalographic activity not caused by [Mahla, Grundy, Schmidt, Richards, Mixson], A183
equipotent concentrations of thiopental and, effects of, on myocardial performance of blood-perfused isolated rabbit heart preparation [Mouren, Albo, Plaud, Szekely, Hendrix, Vertomen, Hebrard, Baron, Viars], A512
etomidate-isoflurane versus,: anesthesia for carotid endarterectomy [Paillot, Van Hemelrijck, Van Aken], A180
with fentanyl [Glass, Dyar, Jhaveri, Goodman, Goodale], A44
general anesthetic potency of, is consistent with Meyer-Overton Rule [Tonner, Poppers, Alifimoff, Miller], A586
growth of staphylococcus aureus in [Sosis, Braverman, Villaflor], A439
improves electrophysiological recovery after anoxia in rat hippocampal slice [Rosenberg, Kass, Cottrell], A606
as induction and maintenance agent for cesarean section: maternal and neonatal effects [Richardson, Abboud, Zhu, Donovan, Peres da Silva, Song, Gottschling, Homyak, Houpt, Yakal, Rogers], A1078
for induction and maintenance of anesthesia in children: comparative study [Halpern, Crawford, Sloan, Sikich, Bissonnette, Lerman], A962
injection, metoclopramide reduces pain of [Ganta, Howard], A674
injection, modified bier block abolishes local pain associated with [Holak, Mangar], A732
interaction of dexmedetomidine and, in chronically instrumented dogs [Proctor, Schmeling, Kampine, Warltier], A558
is desflurane superior to?, for outpatient anesthesia [Leben-bom-Mansour, Pandit, Kothary, Randel, Levy], A19
is GABA-mediated synaptic transmission enhanced by? [Yamamura, Ohisuka, Furumido, Tsutahara, Kemmotsu], A588
isoflurane versus, for ambulatory surgery, recovery and discharge after [Valanne, Korttila], A15
maternal and fetal effects of, in ewe [Alon, Rosen, Shnider, Ball, Parer], A1077
midazolam compared with, for monitored sedation [Pratila, Fischer, Alagesan, Alagesan, Reinsel, Pratilas], A20
midazolam versus, for prolonged sedation in ICU [Geller, Weinbroum, Sorkine, Silbiger, Halpern], A269
midazolam versus,: ICU sedation following CABG [Higgins, Yared, Estafanous, Coyle, Vassel, Goodale], A278
modulation of $\mathrm{GABA}_{A}$ receptor by: protein or lipid interaction? [Hales, Lambert], A587
morphine and barbiturates versus, in sedation of patients with severe head injury [Pearson, Kruse, Demetrion], A248
negative inotropic effect of thiopental greater than, at equipotent concentrations [Cork, Azari, Kramer, Behr, Kaul], A317
negative inotropic effects of, not potentiated by alfentanil, in perfused isolated rat hearts [Rouge, Ouhayoun, Gantet, Ewquerre, Cathala], A513
in pediatric patients: effect of dose and age [Blackstock, Steward], A924
pharmacokinetics and dynamics of, [Monk, Ding, Smith, White], A314
for prevention of chemotherapy-induced nausea and vomiting in pediatric cancer patients [Scher, McDowall, Barst], A1050
propofol-nitrous oxide versus halothane/isoflurane-nitrous oxide in pediatric outpatient surgery [Martin, Bargas, Nicolson, Chan, Seidl-Freidman, Tifanny], A970
QT interval during intubation with [Guiraud, Chassard, Gelas, Bouletreau], A83
rate of infusion of, for constant concentration differs from pharmacokinetic prediction [Crankshaw, Morgan, Dawson], A312
recovery and discharge times following thiopental, halothane and, in pediatric outpatients [Hannallah, Schafer, Britton, Norden, Patel], A25
recovery characteristics following induction of, and maintenance anesthesia in children [Halpern, Crawford, Sloan, Sikich, Bissonnette, Lerman], A16
repeated infusions of, changes in EEG, cerebral blood flow, and cerebral blood flow velocity with, in dogs [Kochs, Cunningham, Hoffman, Werner, Albrecht, Schulte am Esch], A617
responsiveness maintained during: human $\mathrm{CBF}-\mathrm{CO}_{2}$ [Fox, Gelb, Manninen, Farrar], A169
sedation, power spectrum changes during [Veselis, Reinsel, Marino, Wronski], A181
as sedation for ophthalmic nerve blocks, effects of [Beatie, Stead], A28
in sedative doses is amnestic agent [Veselis, Reinsel, Marino, Wronski], A1023
single bolus dose of methohexital and, effects of, in eye surgery patients [Moorthy, Dierdorf, Reddy, Mattice, Yee], A39
spontaneous movements induced by, decreased by nalbuphine not droperidol [Borgeat, Fuchs, Tassonyi], A186
thiopental versus: effect on myocardial contractility [Aasen, Rooney, Hirsch, Mathru, Kross, Rao], A511
time course of ventilatory depression following [Gross, Conard, Blouin], A1095
total, EEG characteristics of emergence from [Traast, Kalkman], A184
tracheal intubation after, without neuromuscular blocker is not practical [Kothary, Pandit, Lebenbom-Mansour, Levy, Randel], A1111
vasodilation by calcium channel antagonist action produced by [Chang, Lacy, Davis], A553
simulation of, by IVA-SIM interactive computer program [Schuttler, Kloos], A329

## sufentanil

auditory evoked potentials to pitch change during [Plourde, Joffe], A449
cerebral microvascular effects of, in piglets [Monitto, Kurth], A542
effect of, on neurogenic motor evoked potentials recorded at spinal and sciatic level [Peterson, Mongan], A179
fentanyl versus,: pharmacokinetic comparison during and after infusion for neurosurgical anesthesia [Artru, Levron, Charlot, Le Moing, Chacornac], A324
inotropic effect of, [Martin, Lin, Lee, Lee], A514
total, EEG characteristics of emergence from [Traast, Kalkman], A184
thiamylal
differential effects of, on respiratory muscles of larynx in dogs [Iwasaki, Namiki, Omomte, Yamakage, Yamasawa], A115 thiopental
dose requirement and distribution of, altered by dexmedetomidine [Mappes, Buhrer, Lauder, Stanski, Maitre], A306
effect of, on intercellular communications between astrocytes [Mantz, Cordier, Desmonts, Giaume], A581
effect of, on transcranial magnetic motor evoked potentials in neurosurgical patients [Losasso, Boudreaux, Muzzi, Cucchiara, Daube], A1032
equipotent concentrations of propofol and, effects of, on myocardial performance of blood-perfused isolated rabbit heart preparation [Mouren, Albo, Plaud, Szekely, Hendrix, Vertomen, Hebrard, Baron, Viars], A512
growth of staphylococcus aureus in [Sosis, Braverman, Villaflor], A439
loading of, and hypothermic circulatory arrest for complex cerebral artery aneurysm surgery [Stone, Young, Solomon, Smith, Ostapkovich], A54
negative inotropic effect of, greater than propofol at equipotent concentrations [Cork, Azari, Kramer, Behr, Kaul], A317
propofol versus: effect on myocardial contractility [Aasen, Rooney, Hirsch, Mathru, Kross, Rao], A511
QT interval during intubation with [Guiraud, Chassard, Gelas, Bouletreau], A83
similar effects of tetrodotoxin and, on sodium levels in rat hippocampal slice [Abramowicz, Kass, Cottrell], A607
time course of ventilatory depression following [Gross, Conard, Blouin], A1095
Anesthetics, local
absorption of, via vascular wall: In Vitro study [Tambakis, Tadoori, Lovett, Doss, Pillalamari, Chaudhry, Gintautas, Abadir], A768

## bupivacaine

$0.25 \%$, comparative study of $0.25 \%$ ropivacaine and, for brachial plexus anesthesia [Hickey, Rowley, Candido, Ramamurthy, Winnie], A711
antinociceptive interactions between morphine and, given epidurally [Rattan, McDonald, Tejwani], A760
effects of, after outpatient arthroscopy [Smith, Shively, White], A667
effects of $p \mathrm{H}$-adjustment and warming of, on onset and duration of epidural anesthesia: prospective study in 270 children [Mansoor, Dalens], A938
interpleural, in plasma and lung lymph, pharmacokinetics of [Suresh, Johnston, Traber, Traber, Arens], A756
intravenous, nimodipine reduces cardiorespiratory toxicity of, in rats [Hyman, Kinney, Horn, Skelley, Kambam], A677
mechanism of action of, on synaptic transmission in parasympathetic ganglia [Tabatabai, Booth], A600
pharmacokinetics of, in pregnant ewes [Wlody, Santos, Arthur, Pedersen, Morishima, Finster, Covino], A829
plasma levels after epidural anesthesia in newborns [Rochette, Beauvoir, Desh, Biboulet, d'Athis], A917
prolonged sciatic nerve blockade with, using biodegradable polymer matrix, biochemical and histologic effects of [Masters, Berde, Ward, Martyn, Kupsky], A680
stimulation of cyclic AMP production by: possible mechanism of local anesthetic cardiovascular toxicity [Butterworth, Brownlow, Cole, Prielipp, Anderson], A682
sustained release of, from biodegradable polymer matrix, prolonged sciatic nerve block with [Masters, Berde, Dutta, Langer], A765
toxicity of, increased by epinephrine, in rats [Kinney, Hyman, Horn], A681

## butamben

suspension, $10 \%$, treatment of chronic intractable back pain with injection of [Shulman, Ivankovich, Braverman, Lubenow], A739
chloroprocaine
continuous caudal anesthesia with, for premature infants undergoing inguinal hernia repair [Henderson, Sethna, Berde], A916
cocaine
depresses myocardial contractility and produces diastolic dysfunction in conscious dogs [Pagel, Power, Warltier], A508
hypertension induced by, and response to treatment with labetalol, in ewe [Hughes, Vertommen, Rosen, Messer, Espinoza, Parer, Shnider], A1075
intracoronary administration, nitroglycerin augments coronary flow but does not reverse myocardial depression during [Buffington], A509
pregnancy alters pharmacodynamics of, in rats [Morishima, Cooper, Masaoka, Miller], A827
time dependent cocaine-induced increase in plasma LDH activity decreased by buprenorphine pretreatment [Shukla, Bansinath, Goldfrank, Turndorf], A626
lidocaine
$1 \%$, with and without sodium bicarbonate for attenuation of pain of skin infiltration and intravenous catheterization [Ferrante, Steinbrook, Hughes, Kistler, Manzi], A736
attenuation of injection pain from [Farley, Hustead, Robinson, Becker], A679
convulsion induced by, effect of acute hypertension on, in rats [Yokoyama, Benson, Goto, Unruh, Arakawa], A717
convulsion induced by, effect of flumazenil on, in rats [Yokoyama, Benson, Goto, Unruh, Arakawa], A728
differential effects of, on tonic nerve ending discharge versus axonal conduction [Tanelian, MacIver], A683
effects of, on purified batrachotoxin-modified sodium channels [Flash, Mills, Levinson, Recio-Pinto], A362
electrode sensitive to [Yokono, Yokono, Ogli, Satake, Kaneshina], A358
inhibitory effects of, on proton pump of bacteriorhodopsin [Nishimura, Hamanaka, Kaminoh, Ueda], Al039
intravenous, inhibits induced laryngospasm during halothane anesthesia, in dogs [Jarnberg, Andersen, Cohen, Jamond, Smith], A971
mechanism of action of, on synaptic transmission in parasympathetic ganglia [Tabatabai, Booth], A600
placental transfer of, during maternal hypoxia [Waters, Ramanathan], A828
plasma levels after epidural anesthesia in newborns [Rochette, Beauvoir, Desh, Biboulet, d'Athis], A917
spinal: optimal agent for inguinal herniorrhaphy in infants [Sukhani, Ramamoorthy, Wahood, Black], A914

## mepivacaine

adding fentanyl and clonidine to, results in rapid onset and prolonged anesthesia and analgesia after brachial plexus blockade [Singelyn, Muller, Gouverneur], A653

## procaine

inhibitory effects of, on proton pump of bacteriorhodopsin [Nishimura, Hamanaka, Kaminoh, Ueda], A1039

## proparacaine

for topical eye anesthesia, reduction of pain from initial application of [Brady, Robinson, Hustead, Becker], A678

## ropivacaine

$0.25 \%$, comparative study of $0.25 \%$ bupivacaine and, for brachial plexus anesthesia [Hickey, Rowley, Candido, Ramamurthy, Winnie], A711
pharmacokinetics of, in pregnant ewes [Wlody, Santos, Arthur, Pedersen, Morishima, Finster, Covino], A829
wound healing not impaired by, in pigs [Carpenter, Guinard, Owens, Ricciardelli], A710
tetracaine
inhibitory effects of, on proton pump of bacteriorhodopsin [Nishimura, Hamanaka, Kaminoh, Ueda], A1039
intrathecal injection of, histologic changes following, in neonatal rabbit [Britton, Nagel, Rice, Eighmy, Muldoon], A913
two distinct modes of blockade of single sodium channels manifested by [Gingrich, Beardsley, Yue], A687

## Anesthetics, volatile

cloning gene controlling sensitivity to, in Caenorhabditis elegans [Sedensky, Morgan, Hudson], A648
desflurane
alfentanil/nitrous oxide versus, for outpatient laparoscopy [Pavlin, Kallar, Everett, Hautman, Rapp, Luke, Lecky], A11
analgesia in obstetrics: maternal and neonatal effects [Swart, Abboud, Zhu, Donovan, Peres da-Silva, Justice, Schaefer, Smith, Toliver, Skeen, Yakal, Rogers], A844
cardiovascular effects of, in outpatients [Fletcher, Sebel, Murphy, Smith, Flister, Mick], A140
comparative effects of isoflurane and, on cerebral blood flow [Ornstein, Young, Ostapkovich, Prohovnik, Stein], A209
comparison of propofol with, in outpatients undergoing peripheral orthopedic surgery [Rapp, Conahan, Pavlin, Levy, Hautman, Luke, Lecky], A12
consequences of misfilling contemporary vaporizers with. [Andrews, Johnston, Kramer], A887
differential effects of, in isolated guinea pig hearts [Boban, Buljubasic, Stowe, Kampine, Bosnjak], A506
effect of, with $\mathrm{N}_{2} \mathrm{O}$ on cerebrospinal fluid pressure in patients with supratentorial mass lesions [Muzzi, Daltner, Losasso, Weglinski, Milde], A167
effects of, on hemodynamics and echocardiographic measures of ischemia [Helman, Bellows, Leung, Velasco, Mangano, SPI Research Group], Al52
human liver volatile anesthetic defluorination: role of cytochrome P450IIEI [Kharasch, Thummel], A350
inhalational induction with, effects of premedication on anesthetic requirement, speed of induction and airway activity [Kelly, Hartman, Embree, Sharp, Artusio], A9
is halothane faster than? [Cote, Liu, Alifimoff, Landis], Al7is propofol superior to?, for outpatient anesthesia [Leben-bom-Mansour, Pandit, Kothary, Randel, Levy], A19
myocardial ischemia and: comparative risk versus sufentanil anesthesia in patients undergoing coronary artery bypass graft surgery [Helman, Leung, Bellows, Pineda, Mangano, SPI Research Group], All24
in pediatric anesthesia: maintenance and emergence characteristics [Dinner, Embree; Sharp, Damask], A929
propofol versus, for outpatient anesthesia [Smith, Van Hemelrijck, White], A13
propofol versus, for outpatient laparoscopic surgery [Kallar, Everett], A10
propofol versus, for outpatient laparoscopy [Thirion, Clergue, Seebacher], A18
relative potency of halothane, isoflurane and, in triggering episodes of malignant hyperthermia in swine [Gammel, Wedel, Milde, Iaizzo], A296
vital capacity rapid inhalation induction with, effects of premedication on emergence characteristics and patient acceptance [Hartman, Kelly, Embree, Sharp, Artusio], A23
diethyl ether
enhances GABA-gated chloride flux by allosteric mechanism [Quinlan, Firestone], A1034
isolation of mutations that alter sensitivities to, in Caenorhabditis elegans [Morgan, Sedensky, Thomas, Kiss], A649
enflurane
aging affects kinetic estimates of volumes and perfusions for, in humans [Strum, Eger, Unadkat, Johnson, Carpenter], A375
assessing and characterizing hypnotic and analgesic effects of anesthetic drugs [Fukunaga, Fukunaga, Kikuta], A45
does anesthetic technique affect hemostasis after cardiac surgery? [Salmenpera, Kuitunen, Hynynen, Heinonen, Fyhrquist], A74
dose-effect on motor and somatosensory evoked potentials, comparative analysis of, in primate [Ghaly, Kartha, Stone, Krinsky, Asokan, Alexander], A613
dose-response relationship of ORG 9426 during [Oris, Vandermeersch, van Aken, Crul], A1063
effect of, on cortical magnetic motor evoked potentials [Sloan, Levin], A450
effect of, on time course and amplitude of $\mathrm{CA}^{2+}$ transients in electrically-stimulated cardiac myocytes [Wilde, Davidson, Knight], A366
effects of, on conduction velocity in Purkinje fibers in dogs [Vodanovic, Turner, Marijic, Kampine, Bosnjak], A569
effects of, on spinal cord protein kinase [Austin, Firestone], A1041
endo/epicardial flow ratio with [Cork, DiNardo, Hilwig, Kern], A505
endogenous norepinephrine effect attenuated by, in isolated rabbit mesenteric veins [Stadnicka, Flynn, Bosnjak, Kampine], A572
enhances GABA-activated chloride currents in cultured rat hippocampal neuronsat clinically relevant concentrations [Harrison, Jones, Brooks], A1040
human liver volatile anesthetic defluorination: role of cytochrome P450IIEI [Kharasch, Thummel], A350
infusion requirements of ORG 9426 in patients receiving [Shanks, Fragen, Ling, Pemberton, Dunn, Howard], A1068
inhalational, effect of on ischemic kidney, in rats [Yoshimura, Sameshima, Miyao, Oda, Yoshida], A335
inhibition of $\mathrm{Na} / \mathrm{Ca}$ exchange in heart cells by [Haworth, Goknur], A576
isolation of mutations that alter sensitivities to, in Caenorhabditis elegans [Morgan, Sedensky, Thomas, Kiss], A649
prolongs GABA-mediated inhibitory postsynaptic currents at synapses between cultured rat hippocampal neurons [Jones, Hornberger, Harrison], A580
reduces depolarization-induced calcium entry into cultured rat hippocampal neurons [Bleakman, Jones, Roback, Hornberger, Radke, Miller, Harrison], A583

## halothane

aging affects kinetic estimates of volumes and perfusions for, in humans [Strum, Eger, Unadkat, Johnson, Carpenter], A375
agonist specificity exhibited by, in attenuating canine cerebral artery contractions [Martin, Sill, Nelson], A541
alteration by, of reactivity to PGF2a in human cerebral arteries [Reinstrup, Uski, Messeter], A200
altered release and metabolism of norepinephrine in superfused canine saphenous veins in presence of [Kamath, Rorie, Tyce], A557
assessing and characterizing hypnotic and analgesic effects of anesthetic drugs [Fukunaga, Fukunaga, Kikuta], A45
attenuation of $\alpha 1$ and $\alpha 2$ adrenoceptor-mediated pressor responses by, differences in, in dogs [Tsuchida, Sato, Namiki], A551
biphasic tension response to $\mathrm{K}^{+}$caused by, in isolated pulmonary artery [Fehr, Schuler, Rhone, Larach], A566
calcium agonist bay K 8644 potentiates isoflurane/halothane In Vitro contracture reponse of malignant hyperthermia susceptible muscle to same extent [Adnet, Krivosic-Horber, Adamantidis, Reyford, Haudecoeur, Dupuis], A295
carbon dioxide affects middle cerebral artery blood flow velocity during general anesthesia [Pashayan, Mahla, Richards], A172
coronary blood flow during isoflurane and, comparison of, in chronically instrumented dogs [Khalil, Jones, Foex], A503
decreases cytosolic ionized calcium concentration during acetylcholine-induced contraction of canine trachealis muscle [Jones, Housmans, Warner, Rehder], A639
differential effects of, on brain C-fos and jun-B messenger RNA [Marota, Crosby, Uhl], A647
differential effects of, on $\mathrm{Ca}^{2+}$ exchange in endothelial cells [Shayevitz, Williams, Varani], A1001
differential sensitivity to, of genioglossus, intercostals, and diaphragm: comparison between kittens and adult cats [Ochiai, Guthrie, Motoyama], A925
direct depression of myocardial function by, in isolated, perfused infant rabbit heart [Palmisano, Kampine, Stowe, Bosnjak], A926
dose-dependent effects of, on $\mathrm{CO}_{2}$ responses of inspiratory and expiratory bulbospinal neurons and phrenic nerve activity in dogs [Stuth, Tonkovic-Capin, Zuperku, Kampine], A1096
dose-response relationship of ORG 9426 during [Oris, Vandermeersch, van Aken, Crul], A1063
effect of, on canine cerebral arteries In Vitro [Brian, Kennedy], A615
effect of, on canine tracheal smooth muscie: role of cytosolic $\mathrm{Ca}^{2+}$, cAMP and protein kinase C [Yamakage, Namiki], A354
effect of, on cortical magnetic motor evoked potentials [Sloan, Levin], A450
effect of, on defibrillation threshold [Guo, Jones, Gelineau, Solomon, Hantler], A574
effect of, on dorsal aortic blood flow, in stage 24 chick embryo [Wojtczak, Hu, Clark], A561
effect of, on intercellular communications between astrocytes [Mantz, Cordier, Desmonts, Giaume], A581
effect of, on platelet interaction with coronary circulation [Gobeil, Blaise, Tanguay], A519
effect of, on time course and amplitude of $\mathrm{CA}^{2+}$ transients in electrically-stimulated cardiac myocytes [Wilde, Davidson, Knight], A366
effect of, on time course and amplitude of $\mathrm{SR} \mathrm{CA}^{2+}$ release by caffeine in cardiac myocytes [Wilde, Davidson, Knight], A365
effect of duration of, on pulmonary acid injury [Coleman, Rutter, Tait, Johnson, Knight], A998
effects of, on $\mathrm{Ca}^{2+}$ homeostasis in oxidant-injured endothelium [Shayevitz, Williams, Varani], A1002
effects of, on calcium and potassium currents in isolated smooth muscle cells of dog coronary arteries [Buljubasic, Rusch, Marijic, Kampine, Bosnjak], A370
effects of, on conduction velocity in Purkinje fibers in dogs [Vodanovic, Turner, Marijic, Kampine, Bosnjak], A569
effects of, on coronary collateral circulation in chronically instrumented dogs [Wouters, van Aken, Schreinemakers, Flameng], A504
effects of, on retinal blood flow in cats [Roth], A377
effects of, on single potassium channels in isolated smooth muscle cells of dog coronary arteries [Buljubasic, Marijic, Kampine, Bosnjak], A369
effects of, on spinal cord protein kinase [Austin, Firestone], A1041
effects on atelectasis, phrenic nerve stimulation during [Hedenstierna, Tokics, Lundquist, Andersson, Strandberg, Brismar], A129
endo/epicardial flow ratio with [Cork, DiNardo, Hilwig, Kern], A505
endogenous norepinephrine effect attenuated by, in isolated rabbit mesenteric veins [Stadnicka, Flynn, Bosnjak, Kampine], A572
endothelial cell calcium mobilization altered by [Loeb, $O^{\prime}$ 'Brien, Longnecker], A533
enhances GABA-activated chloride currents in cultured rat hippocampal neurons at clinicallyrelevant concentrations [Harrison, Jones, Brooks], A1040
fatty acid alterations in phospholipids of perfused rat liver by [Franks, Kruskal, England, Surber, Sastry], A337
GABA-gated chloride flux enhanced by, in mice selectively bred for sensitivity to diazepam [Quinlan, Winter, Gallaher, Firestone], A582
halothane-epinephrine sensitization, alteration of alpha and beta receptor binding possible mechanism for [Skupski, Miletich, Minshall, Albrecht], A159
halothane-mediated changes in intracellular antioxidantdefenses and redox state, [Yousif, Shayevit, Varani], A999
halothane-oxidant interactions in Ex Vivo perfused rabbit lung: edema formation and eicosanoid production [Shayevit, Johnson, Knight], A339
hypocapnia-induced contraction of isolated dog cerebral artery more susceptible to, than to pentobarbital [Hatano, Nakamura, Toda, Nishiwada, Mori], A548
influence of, on endothelium-dependent circulatory control In Vivo [Greenblatt, Loeb, Longnecker], A532
inhalation, inhibition of brown fat heat production by [Ohlsson, Lindahl, Mohell, Cannon, Nedergaard], A340
inhalational, decreases central catecholamine activity and improves ischemia outcome [Hannigan, Lingamneni, Miletich, Albrecht], A604
inhalational, effect of on ischemic kidney, in rats [Yoshimura, Sameshima, Miyao, Oda, Yoshida], A335
inhibition of $\mathrm{Na} / \mathrm{Ca}$ exchange in heart cells by [Haworth, Goknur], A576
inhibition of natural killer cell simulation with interferon a/b induced by [Markovic, Murasko, Knight], A996
inhibitory effect of, on cytosolic $\mathrm{Ca}^{2+}$ increase and contraction in vascular smooth muscle of rat aorta [Tsuchida, Notsuki, Yamakage, Fujita, Namiki], A531
inhibits vascular cell signalling independent of G-proteins [Sill, Uhl, Eskuri], A528
initial experience of switchover to sevoflurane from, in pediatric anesthesia [Miyasaka, Muto, Takata, Sakai, Kondo, Sun], A1048
interaction of epinephrine and, on caffeine-induced calcium transients from single ventricular myocytes [Knight, Wilde, Haneyl, A364
is desflurane faster than? [Cote, Liu, Alifimoff, Landis], A17
isoflurane versus, effect of $\mathrm{PaCO}_{2}$ on cerebral blood flow distribution during, in rat [Young, Barkai, Prohovnik, Nelson, Durkin], Al70
isolation of mutations that alter sensitivities to, in Caenorhabditis elegans [Morgan, Sedensky, Thomas, Kiss], A649
ketorolac does not decrease MAC of, in rats [Rich, Schacterle, Moscicki, DiFazio, Adams], A769
liver cytosolic proteins from halothane-treated mice recognized by antibodies in halothane hepatitis patients' sera [Lindsey, Martin, Pohl], A993
MAC, reduction of, by epidural fentanyl, compared with intravenous fentanyl [Inagaki, Mashimo, Yoshiya], A323
MAC of, effect of ethanol on, in humans [Slee, Cullen, Unadkat, Pavlin], A332
may suppress action of G-protein, $G p$, in endothelial cells [Robinson-White, Kobayashi], A995
microsomal ethylmorphine N -demethylase activity inhibited by, in rat lung [Ahmad, Kartha], A336
minimum effective dose of, influence of L-dopa on, in rat [Horn, Sastry, Franks], A333
myocardial depression enhanced by, demonstrated by chronically infarcted rat hearts [Skeehan, Musch, Riley], A524
neutrophil suppression with, using flow cytometry [Goolishian, Circeo, Teres, Boldt, Hall], A285
open states of calcium release channel from human and porcine malignant hyperthermia increased by [Nelson], A301
during perfluorochemical ventilation [Kimless-Garber, Wolfson, Carlsson, Shaffer], A361
preserved coupling of CNS blood flow and metabolism during [Szabo, Crosby], A614
prolongs GABA-mediated inhibitory postsynaptic currents at synapses between cultured rat hippocampal neurons [Jones, Hornberger, Harrison], A580
pulmonary production of tumor necrosis factor during, in mice [Knight, Tait, Davidson, Remick, Johnson], A997
reduced exposure to nitrous oxide and, by operating personnel during induction of anesthesia in children using double mask system [Weber, Unterberger, Gangoly], A927
reduces depolarization-induced calcium entry into cultured rat hippocampal neurons [Bleakman, Jones, Roback, Hornberger, Radke, Miller, Harrison], A583
regulation of intracellular pH in C fibers inhibited by [Kracke, Mills, Drake], A597
relative potency of desflurane, isoflurane and, in triggering episodes of malignant hyperthermia in swine [Gammel, Wedel, Milde, Iaizzo], A296
release of 5 -hydroxyryptamine and thromboxane A2 from human platelets inhibited by, in humans [Blaise, Buluran], A520
saturable binding of, to synaptosomal membranes of rat brain [El-Maghrabi, Echenhoff, Shuman], A373
suppression of $\mathrm{CA}^{2+}$ dependent $\mathrm{K}^{+}$conductance in adrenal chromaffin cells by [Pancrazio, Lynch], A1038
vasodilation in coronary vascular smooth muscle, role of potassium channels on [Larach, Schuler, Rhone], A527

## isoflurane

1.0 MAC of, EEG does not predict movement in response to surgical incision at [Dwyer, Rampil, Eger, Bennett], A1025
accuracy of EEG in predicting movement at incision during [Sebel, Bowles, Saini, Chamoun], A446
aging affects kinetic estimates of volumes and perfusions for, in humans [Strum, Eger, Unadkat, Johnson, Carpenter], A375
alteration by, of reactivity to PGF2a in human cerebral arteries [Reinstrup, Uski, Messeter], A200
assessing and characterizing hypnotic and analgesic effects of anesthetic drugs [Fukunaga, Fukunaga, Kikuta], A45
attenuation of $\alpha l$ and $\alpha 2$ adrenoceptor-mediated pressor responses by, differences in, in dogs [Tsuchida, Sato, Namiki], A551
brain potassium homeostasis preserved by, during induced hypotension and hypocapnia, in rats [Waaben, Kaiser, Rossen, Lundbaek, Husum, Hansen], A620
calcium agonist bay K8644 potentiates isoflurane/halothane In Vitro contracture reponse of malignant hyperthermia susceptible muscle to same extent [Adnet, Krivosic-Horber, Adamantidis, Reyford, Haudecoeur, Dupuis], A295
carbon dioxide affects middle cerebral artery blood flow velocity during general anesthesia [Pashayan, Mahla, Richards], Al72
changes in cerebral blood flow during, monitored by transcranial Doppler sonography [Werner, Hoffman, Kochs, Schulte am Esch, Albrecht], A616
coherence analysis of EEG during [Levy, Canals-Curtis], A178
combinations of fentanyl, $\mathrm{N}_{2} \mathrm{O}$ and, EEG prediction of arousal during anesthesia with [Dutton, Smith, Smith], A448
comparative effects of desflurane and, on cerebral blood flow [Ornstein, Young, Ostapkovich, Prohovnik, Stein], A209
comparison of cerebral protective effects of mild hypothermia and, in model of incomplete forebrain ischemia [Sano, Patel, Drummond, Grafe, Cole], A602
comparison of sevoflurane- $\mathrm{N}_{2} \mathrm{O}$ and propofol-isoflurane $-\mathrm{N}_{2} \mathrm{O}$ [Smith, Ding, White], A344
coronary blood flow during halothane and, comparison of, in chronically instrumented dogs [Khali1, Jones, Foex], A503
in deep extubation, minimum alveolar concentration for [Neelakanta, Miller, Anderson], A331
at depths producing burst-suppression EEG pattern does not attenuate hemodynamic response to intubation [Spackman, Messick, Sharbrough], A355
differential effect of, on T-cell subsets and antigen-presenting accessory cells In Vitro [Grun, Maurer, Torjman, Schieren, Maurer], A1000
differential effects of, in isolated guinea pig hearts [Boban, Buljubasic, Stowe, Kampine, Bosnjak], A506
differential effects of, on $\mathrm{Ca}^{2+}$ exchange in endothelial cells [Shayevitz, Williams, Varani], A1001
direct measurement of effects of, on hypoxic pulmonary vasoconstriction during one-lung-ventilation [Groh, Kuhnle, Kubler, Goetz, Peter], A341
does not vasodilate rat thoracic aortic rings by EDRF or other cyclic GMP mediated mechanisms [Brendel, Proctor, Johns], A534
dose-response for thermoregulatory sweating threshold and gain during [Washington, Sessler, Prager, McGuire, Merrifield, Hudson, Moayeri], A194
dose-response relationship of ORG 9426 during [Oris, Vandermeersch, van Aken, Crul], Al063
EEG effect of, potentiated by pancuronium, in dogs [Schwartz, Navedo, Berman], A792
effect of, in pregnant sheep: uterine blood flow and fetal wellbeing [Stein, Masaoka, Wlody, Santos, Pedersen, Morishima, Finster], A851
effect of, on baroreflex function in rabbit [Wilson, Bell, Quandt, Kampine], A1120
effect of, on canine cerebral arteries In Vitro [Brian, Kennedy], A615
effect of, on cortical magnetic motor evoked potentials [Sloan, Levin], A450
effect of, on dorsal aortic blood flow, in stage 24 chick embryo [Wojtczak, Hu, Clark], A561
effect of, on intercellular communications between astrocytes [Mantz, Cordier, Desmonts, Giaume], A581
effect of, on time course and amplitude of $\mathrm{CA}^{2+}$ transients in electrically-stimulated cardiac myocytes [Wilde, Davidson, Knight], A366
effect of, on time course and amplitude of $\mathrm{SR} \mathrm{CA}^{2+}$ release by caffeine in cardiac myocytes [Wilde, Davidson, Knight], A365
effect of, with $\mathrm{N}_{2} \mathrm{O}$ on cerebrospinal fluid pressure in patients with supratentorial mass lesions [Muzzi, Daltner, Losasso, Weglinski, Milde], A167
effect of duration of, on pulmonary acid injury [Coleman, Rutter, Tait, Johnson, Knight], A998
effects of, on $\mathrm{Ca}^{2+}$ homeostasis in oxidant-injured endothelium [Shayevitz, Williams, Varani], A1002
effects of, on conduction velocity in Purkinje fibers in dogs [Vodanovic, Turner, Marijic, Kampine, Bosnjak], A569
effects of, on coronary collateral circulation in chronically instrumented dogs [Wouters, van Aken, Schreinemakers, Flameng], A504
effects of, on regional blood flow distribution in rats [Habazettl, Conzen, Vollmar, Peter, Messmer], A549
effects of, on spinal cord protein kinase [Austin, Firestone], A1041
effects of, on transient outward potassium current in Purkinje fibers [Supan, Buljubasic, Marijic, Eskinder, Kampine, Bosnjak], A368
elimination of, from membrane oxygenator during cardiopulmonary bypass [Eckenbrecht, Griffin, Quinn], A367
endo/epicardial flow ratio with [Cork, DiNardo, Hilwig, Kern], A505
endogenous norepinephrine effect attenuated by, in isolated rabbit mesenteric veins [Stadnicka, Flynn, Bosnjak, Kampine], A572
endothelial cell calcium mobilization altered by [Loeb, $\mathrm{O}^{\prime}$ Brien, Longnecker], A533
enhancement of enzymatic phospholipid N -methylation in rat brain synaptosomes during [Franks, Sastry, Surber, England], A338
enhances GABA-activated chloride currents in cultured rat hippocampal neurons at clinically relevant concentrations [Harrison, Jones, Brooks], A1040
halothane versus, effect of $\mathrm{PaCO}_{2}$ on cerebral blood flow distribution during, in rat [Young, Barkai, Prohovnik, Nelson, Durkin], A170
hemodynamic changes during, in ASA I and ASA II surgical patients [Frink, Malan, Atlas, Dinardo, Brown], A156
human liver volatile anesthetic defluorination: role of cytochrome P450IIEI [Kharasch, Thummel], A350
hypoxia during, effect of dexmedetomidine on cerebrovascular response to [McPherson, Traystman], A174
influence of, on endothelium-dependent circulatory control In Vivo [Greenblatt, Loeb, Longnecker], A532
infusion requirements of ORG 9426 in patients receiving [Shanks, Fragen, Ling, Pemberton, Dunn, Howard], A1068
inhalational, decreases central catecholamine activity and improves ischemia outcome [Hannigan, Lingamneni, Miletich, Albrecht], A604
inhalational, effect of on ischemic kidney, in rats [Yoshimura, Sameshima, Miyao, Oda, Yoshida], A335
inhaled, differential effect of, on reflex mesenteric venoconstriction in normotensive and chronically hypertensive rabbit [Stekiel, Tominaga, Bell, Bosnjak, Kampine], A571
inhibition of $\mathrm{Na} / \mathrm{Ca}$ exchange in heart cells by [Haworth, Goknur], A576
inhibition of natural killer cell simulation with interferon a/b induced by [Markovic, Murasko, Knight], A996
inhibitory effect of, on cytosolic $\mathrm{Ca}^{2+}$ increase and contraction in vascular smooth muscle of rat aorta [Tsuchida, Notsuki, Yamakage, Fujita, Namiki], A531
inhibits endothelim-dependent relaxation and cyclic GMP formation in rat aorta [Nakamura, Hatano, Toda, Mori], A530
inhibits signal transduction in cultured vascular smooth muscle cells [Eskuri, Sill, Van Dyke, Uhl], A529
inhibits vascular cell signalling independent of $G$-proteins [Sill, Uhl, Eskuri], A528
isolation of mutations that alter sensitivities to, in Caenorhabditis elegans [Morgan, Sedensky, Thomas, Kiss], A649
lack of bronchodilator effect of subanesthetic concentration of, in asthma [Mercier, Benhamou, Denjean], A972
long propofol infusion versus, for ambulatory surgery, recovery and discharge after [Valanne, Kortila], A15
MAC reduction of, by fentanyl [McEwan, Smith, Dyar, Goodman, Glass], A43
modulates calcium channel current in spinal cord dorsal horn neurons [Heath, Berman] [Heath, Berman], A1037
mutants of Saccharomyces cerevisiae resistant to [Peterson, Keil], A644
neutrophil suppression with, using flow cytometry [Goolishian, Circeo, Teres, Boldt, Hall], A285
nitrous oxide more potent cerebrovasodilator than, in humans [Lam, Slee, Cooper, Bachenbert, Mathisen], A168
prolongs GABA-mediated inhibitory postsynaptic currents at synapses between cultured rat hippocampal neurons [Jones, Hornberger, Harrison], A580
propofol versus,: anesthesia for carotid endarterectomy [Paillot, Van Hemelrijck, Van Aken], A180
relative potency of desflurane, halothane and, in triggering episodes of malignant hyperthermia in swine [Gammel, Wedel, Milde, Iaizzo], A296
release of 5-hydroxytryptamine and thromboxane A2 from human platelets inhibited by, in humans [Blaise, Buluran], A520
splanchnic blood flow during, in rats [Vollmar, Conzen, Habazettl, Peter, Messmer], A550
subanesthetic concentrations of nitrous oxide and, learning and responsiveness at [Dwyer, Bennett, Eger], A334
verapamil associated with, left ventricular dysfunction due to: regional myocardial blood flow assessment [Arvieux, Fagret, Fargnoli, Nivet, Stieglitz, Comet], A507

## methoxyflurane

aging affects kinetic estimates of volumes and perfusions for, in humans [Strum, Eger, Unadkat, Johnson, Carpenter], A375
human liver volatile anesthetic defluorination: role of cytochrome P4501IEI [Kharasch, Thummel], A350

## sevoflurane

in closed circuit anesthesia [Bitoh, Ikeda], A343
comparison of sevoflurane- $\mathrm{N}_{2} \mathrm{O}$ and propofol-isoflurane- $\mathrm{N}_{2} \mathrm{O}$ [Smith, Ding, White], A344
effect of, in pregnant sheep: uterine blood flow and fetal wellbeing [Stein, Masaoka, Wlody, Santos, Pedersen, Morishima, Finster], A851
effect of, on bronchoconstriction caused by histamine or acetylcholine [Katoh, Ikeda], A973
effects of, on regional blood flow distribution in rats [Habazett, Conzen, Vollmar, Peter, Messmer], A549
effects of, using low flow system on liver and kidney [Yasuda, Mishina, Miyano, Tanifuji, Amaki, Kobayashi], A345
endo/epicardial flow ratio with, compared to other volatile agents [Cork, DiNardo, Hilwig, Kern], A505
extended exposure to, serum inorganic fluoride after [Toriumi, Ozaki, Yasuda, Tanifuji, Amaki], A347
hemodynamic changes during, in ASA I and ASA II surgical patients [Frink, Malan, Atlas, Dinardo, Brown], A156
human liver volatile anesthetic defluorination: role of cytochrome P450IIEI [Kharasch, Thummel], A350
inhalational, effect of on ischemic kidney, in rats [Yoshimura, Sameshima, Miyao, Oda, Yoshida], A335
initial experience of switchover from halothane to, in pediatric anesthesia [Miyasaka, Muto, Takata, Sakai, Kondo, Sun], A1048
inorganic fluoride production following, in healthy surgical patients [Morgan, Frink, Ghantous, Gandolfi, Brown], A349
neurologic deficit following incomplete ischemia reduced by, in rats [Werner, Kochs, Hoffman, Mollenberg, Schulte am Esch], A603
prolonged administration of, effect of, on serum concentration of fluoride ion in patients [Kazama, Ikeda], A346
prolonged inhalation of, serum and urinary inorganic fluoride levels after, in man [Kobayashi, Ochiai, Takeda, Sekiguchi, Fukushima], A348
splanchnic blood flow during, in rats [Vollmar, Conzen, Habazettl, Peter, Messmer], A550

## Anesthetic techniques

anesthesia, not paralysis, increases mixed venous $\mathrm{O}_{2}$ [ColonnaRomano, Horrow, Baker], A162

## balanced

epidural anesthesia/analgesia versus general anes-thesia/patient-controlled analgesia: endocrine response to surgical stress [Norris, Parker, Breslow, Crowley, Frank, Rock, Christopherson, Beattie], A696
regional versus general anesthesia, mortality and morbidity of: meta-analysis [Sorensen, Pace], A1053
endobronchial
operative lung CPAP with univent bronchial blocker tube [Benumof, Gaughan, Ozaki], A120

## epidural

alpha-2-agonists, comparison of guanfacine and clonidine, in regard to duration of antinociception, and ventilatory and hemodynamic effects [Smith, Baudendistel, Gibbons, Schweiss], A655
analgesia, antimicrobial properties in agents used for? [Feldman, Chapin, Turner, Contant], A835
analgesia for labor, maternal temperature regulation during [Hortvet, Camann, Hughes, Bader, Datta], A849
analgesic potency and action site of fentanyl, following gastrectomy [Inagaki, Mashimo, Yoshiya], A47
anesthesia with bupivacaine-epinephrine mixture, maternal and fetal catecholamine levels following [Weinberg, Zakowski, Ramanathan], A846
anesthesia/analgesia, versus general anesthesia/patient-controlled analgesia: endocrine response to surgical stress [Norris, Parker, Breslow, Crowley, Frank, Rock, Christopherson, Beattie], A696
antinociceptive interactions between morphine and bupivacaine [Rattan, McDonald, Tejwani], A760
baroreflex control of heart rate during high thoracic epidural anesthesia [Goertz, Seeling, Heinrich], A87
blockade, effect of, on postoperative hypercoagulability [Gibbs, Crawford, Michalopoulus], A714
bowel function following major colon surgery not delayed by [Hart, Faul, Buhrman], A669
bupivacaine, continuous, influence of, on perioperative fluid shifts [Burgess, Brooks, Wade, Perkins, Rodkey], A761
butorphanol and fentanyl, effect of, on shivering during C -section [Chen, Kwan], A843
catheter migration, prospective analysis of, in 1598 surgical cancer patients [deLeon-Casasola, Myers, Rempel, Bacon, Peppriell, Lema], A730
clonidine, following cesarean section: effect of prior local anesthetic [Huntoon, Eisenach, Boese], A855
clonidine, for refractory reflex sympathetic dystrophy [Rauck, Eisenach, Jackson, Speight, Southern], A657
clonidine reduces fentanyl requirements and side effects in postoperative patients [Delaunay, Leppert, Dechaubry, Baubillier, Bonnet], A1086
combining low dose morphine and clonidine prevents bladder size increase: cystographic study in rabbits [Wang, Li, Hiller], A634
comparison of clonidine and bupivacaine for postoperative analgesia [Carabine, Milligan, Moore], A1083
contaminated epidural catheter injection site: can it be cleaned for continued use? [Turner, Feldman, Chapin], A834
continuous analgesia post-C/S: effect of diluent volume [Cohen, Amar, Pantuck, Pantuck, Landa, Widroff], A860
continuous analgesia versusintravenous patient controlled analgesia: vital capacity after thoracotomy [Vanhoorebeeck, Vertommen, Van Aken, Vandermeersch], A116
continuous bupivacaine-fentanyl, nalbuphine ameliorates pruritus caused by, in postoperative patients [Newman, Dragisic, Lubenow, McCarthy, Ivankovich], A770
continuous infusion of low-dose morphine for postoperative analgesia in children [Taylor, Boswell], A937
continuous postoperative infusion, of $0.25 \%$ bupivacaine with or without opiates, unpredictability of sensory level regression during [Ferrante, Fanciullo, Kister, Katz, Concepcion], A750
dexmedetomidine, pharmacokinetic and dynamic studies of [Bucklin, Eisenach, Tucker], A662
effects of, on postoperative morphine consumption [Samra, Willis, Ganta, Pundit], A666
effects of $p \mathrm{H}$-adjustment and warming of bupivacaine on onset and duration of: prospective study in 270 children [Mansoor, Dalens], A938
estimating distance from skin to lumbar epidural space in infants and children [Ikemura, Yamashita], A943
fentanyl, after thoracotomy, shorter hospital stay with [Guinard, Mavrocordatos, Cuttat, Chiolero], A698
fentanyl, intravenous compared with, reduction of halothane MAC by [Inagaki, Mashimo, Yoshiya], A323
fentanyl, intravenous versus, stress response after thoracotomy [Mavrocordatos, Guinard, Chiolero], A697
fentanyl, PCA morphine and, in post-thoracotomy pain, double-blind comparison of [Benzon, Wong, Belavic, Locicero], A712
fentanyl and bupivacaine mixture, stability of [Dawson, Bjorksten, Duncan, Barnes, Hellyar], A746
fentanyl and sufentanil, double-blind comparison of, with intravenous sufentanil for abdominal surgery pain management [Chrubasik, Geller, Graf, Zbinden, Thomson], A752
fentanyl and sufentanil with bupivacaine and neonatal effects [Loftus, Hill, Cohen], A856
fentanyl does not worsen post-cesarean section analgesia when administered before epidural morphine [Vincent, Chestnut, Choi, Coffin, Ostman, Bates, Laszewski], A861
fentanyl-bupivacaine for cesarean section, placental transfer and neonatal effects of [Bang, Helbo-Hansen, Lindholm, Klitgaard], A847
functional measure of epidural space [Bevacqua, Slucky, Felling, Ontell], A724
hypotension and uterine blood flow worsened by, during hemorrhage, in gravid ewes [Vincent, Chestnut, Sipes, Thompson, Debruyn, Bleuer, Chatterjee], A823
hypotensive, hormonal responses during [Zayas, Sharrock, Blumefeld, McDonald, Sealy], A112
intravenous alfentanil versus, by PCA in postoperative patients [Hongnat, Bellenfant, Levy, Alfonsi, Chauvin], A754
intravenous butorphanol versus, for post-cesarean delivery analgesia [Loferski, Camann, Stone, Datta], A848
is posthoracotomy pain syndrome affected by postoperative pain relieving technique? [Miguel, Hubbell], A763
labor analgesia, unilateral blockade during, risk factors associated with [Langeron, Hamza, Narchi, Lecoq, Smida], A832
low dose morphine, combination of intramuscular diclofenac sodium and, for postcesarean analgesia [Sun, Wu, Lin, Chang, Mok], A745
low dose morphine, proglumide potentiates analgesic effect of [Chen, Tsai, Mok, Lippmann], A686
lumbar, effect of puncture level on L 5 and S 1 nerve roots blockade during [Bouguet, Fabas, Riou, Viars], A725
lumbar anatomy, new look at [Hogan], A716
lumbar anesthesia, $5 \%$ hypertonic saline allows rapid fluid loading before [Ph Veroli, Mazoit, Benhamou], A715
lumbar epidural fentanyl reduces pain following thoracic surgery, pre-incisional versus post-incisional: randomized double-blind crossover study [Kavanagh, Katz, Sandler, Nierenberg, Panos], A1087
lumbar steroid injections, vital signs during and after [Romanoff, Johnson, Ellis, Butzin], A723
morphine, HSV recurrent infection following: effect of morphine on herpes simplex virus-specific cytotoxic T lymphocyte function [Bonneau, Sheridan, McDonald, Glaser], A590
morphine, side effects after, nalbuphine better than naloxone for treatment of [Cohen, Archer, Ratner, Kreitzman, Mignano], A845
morphine with butorphanol in pediatric patients [Lawhorn, Brown], A940
in newborn, lidocaine and bupivacaine plasma levels after [Rochette, Beauvoir, Desh, Biboulet, d'Athis], A917
opiates for postoperative pain relief in pediatric patients: morphine versus fentanyl [Lejus, Roussiere, Testa, Ganansia, Ricard]; A941
opioids, comparison of intravenous opioids and, in postoperative management of pediatric anti-reflux surgery [McNeely], A689
patient-controlled analgesia, $0.0625 \%$ bupivacaine/0.0002\% fentanyl via, for pain of labor and delivery [Ferrante, Barber, Segal, Hughes, Datta], A737
patient-controlled analgesia, pharmacokinetic profiles under morphine, methadone, fentanyl, and sufentanil [Chrubasik, Chrubasik, Magora], A753
patient-controlled analgesia during labor, double-blind patient evaluation of [Price, Fontenot, Weinger, Reisner, Henry], A836
patient-controlled analgesia versus épidural analgesia with morphine or bupivacaine/morphine: postoperative outcome after abdominal surgery [Rockemann, Seeling, Bothner, Eifert, Zeininger], A1088
peripheral and cerebral hemodynamic effects of, in newborn lambs [Yaster, Koehler, Traysuman], A918
postoperative analgesia, for chronic cancer patients taking oral narcotics [de Leon-Casasola, Myers, Donaparthi, Bacon, Peppriell, Rempel, Lema], A665
seizures following postdural puncture headache in postpartum women: series with suggested etiology [Shearer, Cunningham, Wallace, Giesecke], A852
skin surface warming before epidural block bunts anestheticinduced hypothermia [Glostenm, Hynson, Sessler, McGuire], A854
sufentanil, administered during labor and delivery, maternal and neonatal plasma levels after [Kick, Vertommen, van Aken, Gryseels], A837
sufentanil, does it spread rostrally in spinal axis? [Petty, Stevens, Hill, Hahn, Kao], A744
systemic effects of clonidine and bupivacaine [Carabine, Milligan, Moore], A661
technique used to identify epidural space, does it affect quality of analgesia?: air versus saline [Huffnagle, Norris, Leighton, Arkoosh, de Simone], A831
tension applied to lumbar epidural catheters during removal is much greater with patient sitting versus lying [Blackshear, Gravenstein, Radson], A833
thoracic, dopamine or norepinephrine infusion during? differences in hemodynamic effects and plasma norepinephrine levels [Lundberg, Biber, Martner, Raner, Winsol, A740
thoracic, effect of, on pulmonary function in normals [Speight, Rauck, Mann], A729
thoracic, effects of, on metabolism of ischemic myocardium induced by intracoronary injection of endothelin, in dogs [Fujita, Tsuchida, Kawamata, Kobayashi, Namiki], A515
triamcinolone causes prolonged and severe suppression of pituitary-adrenal axis [Kay, Raff, Findling], A694
using bupivacaine and opioid versus subcutaneous morphine: postoperative pulmonary complications after abdominal surgery [Farhat, Thomas, Rey, Bourgain, Desruennes, Jayr], A126
which vasopressor should one give to treat hypotension during magnesium sulfate. infusion and? [Chestnut, Vincent, Sipes,Debruyn, Bleuer, Chatterjee], A824
epidural, caudal
in children: a survey [Gunter], A936
continuous anesthesia with 2 -chloroprocaine for premature infants undergoing inguinal hernia repair [Henderson, Sethna, Berde], A916
fentanyl-bupivacaine for analgesia in children [Campbell, Yentis, Fear, Bissonnette], A939
steroids, for treatment of pelvic pain due to cancer [Maytorena, Sierra, Prihoda, Hoffman, Tingle], A727
thoracic epidural anesthesia via caudal approach in children [Gunter, Eng], A1049

## hypotensive

adenosine, renal blood flow and function during controlled hypotension with, in dogs under halothane anesthesia [Jarnberg, Jamond, Westman, Woods], A552
adenosine-induced, cerebral blood flow during, in human [Lam], A173
direct arteriolar and venular dilating effects of various vasoactive agents [Chen, Chang, Guth], A564
epidural anesthesia, hormonal responses during [Zayas, Sharrock, Blumefeld, McDonald, Sealy], A112
isoflurane preserves brain potassium homeostasis during, in rats [Waaben, Kaiser, Rossen, Lundbaek, Husum, Hansen], A620
manual versus automatic control in induction and maintenance of [Scanlon, Martin, Smith], A462
sodium nitroprusside, renal blood flow and function during controlled hypotension with, in dogs under halothane anesthesia [Jarnberg, Jamond, Westman, Woods], A552
vital organ blood flow during [Kick, van Aken, Wouters, Verbesselt, an Hemelrijck], A625

## hypothermia

deep, actual brain temperature during, recorded at standard monitoring sites [Stone, Young, Smith, Solomon, Ostapkovich, Wang], A483
mild, comparison of cerebral protective effects of isoflurane and, in model of incomplete forebrain ischemia [Sano, Patel, Drummond, Grafe, Cole], A602
thiopental loading and hypothermic circulatory arrest for complex cerebral artery aneurysm surgery [Stone, Young, Solomon, Smith, Ostapkovich], A54
induction
effect of pharyngo-laryngeal topical lidocaine on swallowing reflex [Dalibon, Dureuil, Montravers, Ducros, Desmonts], Al25
effects of alfentanil on cardiovascular and hormonal stress response to tracheal intubation [Miller, O'Brien, Martineau, Abou-Hamad, Hull, Greenway, Hindmarsh], A82
intubation conditions and time-course of action of ORG 9426 Vandenbrom, Wierda, Huizinga, Hennis], A788
ketanserine does not decrease hemodynamic response to intubation in healthy unpremedicated patients [Schwieger, Forster, Tassonyi], A146
ORG 9426: onset, intubating conditions, and clinical duration [Tullock, Wilks, Brandom, Cook], A789
parents' response to observation of, in their children [Honig, aguire, Hannallah], A1050
radiological prediction of difficult intubation: posterior CO-1 and C1-2 Gaps [Calder, Calder, Crockard], A190
rapid sequence, comparison of fentanyl, esmolol, and their combinations as anesthetic adjuncts during [Chung, Sinatra, Halevy, Paige, Silverman], A155
semi-emergent intubation: hemodynamic changes [Mort, Brakoniecki], A1017
smokers more prone to arrhythmias than nonsmokers during rapid sequence [Martin, Stevens], A91
with thiopental, hyperglycemia following, in healthy women [Amar, Shamoon, Lazar, Salama, Frishman], A206
tracheal intubation after propofol anesthesia without neuromuscular blocker is not practical [Kothary, Pandit, Lebenbom-Mansour, Levy, Randel], A1111
vital capacity rapid inhalation induction with desflurane, effects of premedication on emergence characteristics and patient acceptance [Hartman, Kelly, Embree, Sharp, Artusio], A23
insufflation
of $\mathrm{O}_{2}$, low and high flow tracheal, supports oxygenation in apneic dogs after TTX poisoning [Mackenzie, Barnas, Smalley, Park, Miller], A284
prolonged apneic oxygenation, changes in systemic and pulmonary hemodynamics and acid-base balance during [Ikdea, Schweiss]; A1117
intra-articular bupivacaine and morphine, comparison of, for analgesia following arthroscopic knee surgery [Dickstein, Raja, Johnson], A767

## intravenous

catheterization, $1 \%$ lidocaine with and without sodium bicarbonate for attenuation of pain of skin infiltration and [Ferrante, Steinbrook, Hughes, Kistler, Manzi], A736
dexmedetomidine, pharmacokinetic and dynamic studies of [Bucklin, Eisenach, Tucker], A662
modifying stress response during [Monk, Ding, Smith, White], A42
opioids, comparison of epidural opioids and, in postoperative management of pediatric anti-reflux surgery [McNeely], A689
patient controlled anesthesia for prolonged conscious sedation [Monahan, David, Finley, Buhrman], A32
neurolept
effect of neuroleptanalgesia on motor potentials evoked by transcranial magnetic stimulation in primates [Ghaly, Stone, Kartha, Asokan, Alexander], A595
pulsed iontrophoretic delivery of angiotensin-converting enzyme inhibitor [Zakzewski, Amory, Li, Jasaitis], A371

## regional

3-in-1 block for postoperative analgesia following anterior cruciate ligament reconstruction [Bingham, Indelicato, Duke, Merrell], A735
are anesthesia residency programs still failing to teach this? [Kopacz], A759
bilateral infraorbital block with $0.05 \%$ bupivacaine in children [Nicodemus, Ferrer, Cristobal, de Castro], A690
brachial plexus, comparative study of $0.25 \%$ ropivacaine and $0.25 \%$ bupivacaine for [Hickey, Rowley, Candido, Ramamurthy, Winnie], A711
does it significantly delay surgery? retrospective study [Nichols, Nagel, Gantt], A884
effects of, on postoperative morphine consumption [Samra, Willis, Ganta, Pundit], A666
general anesthesia versus, mortality and morbidity of: metaanalysis [Sorensen, Pace], A1053
how postoperative nurses feel about [Seltzer, Lessin], A755
interscalene block complications [Urban, McDonald, Urquhart, Sharrock], A733
intrapatellar nerve block for chronic pain following diagnostic knee arthroscopy [Trankina], A738
is posthoracotomy pain syndrome affected by postoperative pain relieving technique? [Miguel, Hubbell], A763
modified bier block abolishes local pain associated with propofol injection [Holak, Mangar], A732
prostatic block, initial results with-new anesthetic for transurethral balloon dilation [Belani, Reddy], A731
sustained release of bupivacaine from biodegradable polymer matrix, prolonged sciatic nerve blockade with [Masters, Berde, Dutta, Langer], A765
regional, axillary brachial plexus
for emergency procedures in young children [Tryba, Haensch, Zenz], A757
single or multiple injections? [Bussac, Akaga, Lena, Legre, Francois], A720

## regional, brachial plexus

blockade, clonidine added to mepivacaine for: minimal effective dose prolonging duration of both anesthesia and analgesia [Bartholomee, Singelyn, Broka, Gouverneur], A1084
regional, intercostal
nerve block by jet injection [Katz, Knarr, Juneja], A726
single-dose and continuous microcatheter, in former preterm infants [McDonald, Berkowitz, Santini, Alverio], A911

## spinal

with 27 -gauge needles for outpatient knee arthroscopy in patients 12 to 18 years old [Kang, Romeyn, Shenton, Tompkins, Furlano], A1103
antinociceptive effects of intrathecal 3a-hydroxy-5a-pregnan20 -one in rat mechanical visceral pain model [Colburn, Winfree, Coombs, Deleo, Twitchell], A594
catheter size, local anesthetic dosing and: retrospective review [Bevacqua, Slucky, Nemec], A702
catheters, where do they go? [van Gessel, Forster, Gamulin], A701
comparison of general anesthesia and, in former premature infant [Krane, Haberkern, Jacobson], A912
continuous: rationale for associating meperidine to lidocaine during induction phase [Maurette, Bonada, Favarel-Garrigues, Ph Erny], A704
dexmedetomidine, pharmacokinetic and dynamic studies of [Bucklin, Eisenach, Tucker], A662
hydroxy-propyl-B-cyclodextrin as, systemic studies on use of: opioid analgesia in rats [Jang, Yaksh, Hill], A376
incidence of postdural puncture headache in obstetrical patients: comparing 24-gauge and 22-gauge Sprotte needles [Leeman, Sears, O'Donnell, Reisner, Jassy, Harmon, O'Donnell, Kelleher, Stanos], A853
intrathecal fentanyl does not improve intrathecal morphine analgesia after cesarean section [Boerner, Norris, Leighton, Arkoosh, Torjman], A858
intrathecal fentanyl for labor analgesia [Zakowski, Goldstein, Ramanathan, Turndorf], A840
intrathecal injection of $8 \%$ tetracaine, histologic changes following, in neonatal rabbit [Britton, Nagel, Rice, Eighmy, Muldoon], A913
intrathecal labor analgesia, comparison of fentanyl, meperidine, and sufentanil for [Honet, Arkoosh, Huffnagle, Norris, Leighton], A839
intrathecal meperidine associated with bupivacaine: dose-range study [Bonnet, Nguyen Thi, Orliaguet, Liu, Delaunay], A747
intrathecal morphine and clonidine, significant synergism between, for visceral antinociception [Harada, Nishioka, Kitahata, Collins], A660
intrathecal morphine and fentanyl with and without bupivacaine for control of postoperative pain after major abdominal surgery [Gwirtz, Peneff], A672
intrathecal sufentanil and fentanyl for labor analgesia, comparison between [Sharkey, Arkoosh, Norris, Honet, Leighton], A841
intrathecal sufentanil/tetracaine for cesarean section surgery [Pan, Mok], A743
lidocaine: optimal agent for inguinal herniorrhaphy in infants [Sukhani, Ramamoorthy, Wahood, Black], A914
model study of local anesthetic distribution: explanation for cauda equina syndrome following continuous spinal anesthesia [Rigler, Drasner], A703
in newborns: bupivacaine plasma concentrations [Beauvoir, Rochette, Desh, Galy, d'Athis], A968
pediatric, without supplement: in search of optimal drug and dose [Ramamoorthy, Sukhani, Black], A915
placement of continuous subarachnoid catheters, causes for difficulty with [Ata, Shulman], A1092
post-dural puncture headache, theophylline for [Schwalbe, Schiffmiller, Marx], A1082
for postpartum tubal ligation: meperidine versus lidocaine [Honet, Costello, Norris, Arkoosh, Leighton], A859
prolongation of: lipid drug carrier as slow delivery system . [Langerman, Grant, Zakowski, Turndorf], A684
spinal catheter does not reduce post-spinal headache after cesarean section [Blaise, Cournoyer, Perrauly, Bedard, Petit, Landry], A857
Sprotte versus Qunicke tip needles in outpatients, randomized comparison of [Broome, Schapiro], A1104
tetracaine, should it be abandoned?: post-anesthesia care unit stay following TURP [Mychaskiw, Chung, O'Connor, Perlstein], A890
trial of therex implantable pump delivered intrathecal MS in cancer pain control [Coombs, Saunders, Maurer, Vernier, Ahles], A741
therapeutic suggestions administered during general anesthesia, ineffectiveness of [Ghoneium, Block, Sum Ping, Ali], Al027
transdermal fentanyl, bioavailability and absorption rate of, [Fiset, Haack, Shafer], A326
Anesthetists, nurse. See under Personnel
Angiotensin. See under Pharmacology; Polypeptides
Anoxia. See under Brain
Antagonists, miscellaneous
benzodiazepines
effect of flumazenil on lidocaine-induced convulsion in rats [Yokoyama, Benson, Goto, Unruh, Arakawa], A728
efficacy of additional flumazenil after ambulatory general anesthesia with midazolam [Bizzarri-Schmid, Philip, Manzi, Dedrick, Mallampati, Mushlin], A30
evaluation of incomplete response to flumazenil [Rupp, Knopes, Carpenter, Stephenson, Breen], A46
flumazenil improves midazolam impaired cognitive function [Ritter, Hoshizaki, Stead], A37
flumazenil in treatment of drug overdose [Weinbroum, Halpern, Sorkine, Rudick, Geller], A268
reversal of midazolam-induced anesthesia by flumazenil during stereotaxic thalamic stimulation and [Berberich, Orliaguet, Nguyen, Rostaing, Duvaldestin], A189
Antagonists, narcotic
methylnaltrexone
ganglionic blockade induced by, in dog [Foss, Orelind], A637
pharmacokinetics of, newopiod antagonist [Foss, Roizen, Moss, Murphy], A360
nalbuphine
better than naloxone for treatment of side effects after epidural morphine [Cohen, Archer, Ratner, Kreitzman, Mignano], A845
nalmefene
comparison of potency and duration of action of naloxone and [Glass, Jhaveri, Quill, Omoigui, Bowers, Leonard, Martel], A380
naloxone
comparison of potency and duration of action of nalmefene and [Glass, Jhaveri, Quill, Omoigui, Bowers, Leonard, Martel], A380
nalbuphine better than, for treatment of side effects after epidural morphine [Cohen, Archer, Ratner, Kreitzman, Mignanol, A845
reverses effects of fentanyl on evoked spinal and cortical potentials for innocuous and noxious electrical stimuli, in rabbit [Lee], A652
Antagonists, neuromuscular relaxants
edrophonium
electrophysiological study on antagonism of d-tubocurarineinduced neuromuscular blockade by [Narimatsu, Ohta, Iwasaki, Namiki], A796
neostigmine
electrophysiological study on antagonism of d-tubocurarine-induced neuromuscular blockade by [Narimatsu, Ohta, Iwasaki, Namiki], A796
reversal of deep neuromuscular blockade with $40 \mu \mathrm{~g} / \mathrm{kg}$ versus $70 \mu \mathrm{~g} / \mathrm{kg}$ neostigmine in infants and children [Bires, McGregor], A964
Antibiotics
erythromycin
effects of preoperative prophylaxis for ambulatory laparoscopy [Narchi, Elhaddoury, Locatelli, Benhamou], A22
Anti-diuretic hormones. See under Hormones
Antiemetics. See under Vomiting
Apnea. See under Ventilation
Aprotinin. See under Pharmacology
Arrhythmia. See under Heart
Arterial catheters. See under Equipment

## Arteries

cannulation
radial artery, acute exacerbation of carpal tunnel syndrome following [Martin, Mineo, Sharrock, Sobel], A473
radial artery, long-term, thrombotic risk of, two different cannulae [Auffray, Martin, Lambert, Saux, Gouin], A892
radial artery, reactive hyperemia produces superior anatomic and flow characteristics for [Joseph, Clark, Boerner, Torjman, Lessin, Seltzer], A475
human mesenteric, vascular smooth muscles of, effects of protamine on [Akata, Kodama, Matsuyama, Takahashi, Yoshitake], A75
phosphodiesterase inhibitors dilate human internal mammary artery In Vitro [Levy, Salmenpera, Meyer, Harrison], Al118
propofol-induced arterial compliance increase accounts for systolic arterial pressure decrease [Dupuy, Schurando, Payen], A144
radial
cannulation, acute exacerbation of carpal tunnel syndrome following [Martin, Mineo, Sharrock, Sobel], A473
insertion of cannula, reactive hyperemia produces superior anatomic and flow characteristics for [Joseph, Clark, Boerner, Torjman, Lessin, Seltzer], A475
long-term cannulation, thrombotic risk of, two different cannulae [Auffray, Martin, Lambert, Saux, Gouin], A892
vascular wall, absorption of local anesthetics via: In Vitro study [Tambakis, Tadoori, Lovett, Doss, Pillalamari, Chaudhry, Gintautas, Abadir], A768
walls of, transfer of morphine and fentanyl across [Bernards, Hill], A685
Artificial ventilation. See under Ventilation
Aspiration. See under Complications
Aspirin. See under Pharmacology
Asthma. See under Lung
Ataractics

## phenothiazines

nicotinic mechanism may underlie antiemetic properties of [Dodson, Braswell], A636

## Atelectasis. See under Lung

Atracurium. See under Neuromuscular relaxants
Atrial natriuretic polypeptides. See under Polypeptides
Autotransfusion. See under Transfusion
Axillary brachial plexus block. See under Anesthetic techniques, regional

B
Bacteremia. See under Infection
Balanced anesthesia. See under Anesthetic techniques
Barbiturates. See under Hypnotics
Baroreceptors. See under Reflexes
Benzodiazepines. See under Antagonists, miscellaneous; Hypnotics
Beta-adrenergic agonists. See under Sympathetic nervous system

## Beta-adrenergic antagonists. See under Sympathetic nervous system

Biliary tract surgery. See under Anesthesia
Blood

## aminocaproic acid

what dose of tranexamic acid is optimally hemostatic? [Horrow, Van Riper, Parmet, Whooley], A986
anemia
in chronic ICU patient, transfusion requirement and role of phlebotomy [Gettinger, Parsonnet, Corwin], A239
hematologic and cardiovascular and side effects of preoperative use of erythropoietin in adolescents undergoing scoliosis surgery [Rothstein, Roye, Verdisco], A959
sickle cell anemia, preoperative transfusion study in: preliminary report [Haberkern, Vichinsky], A871
coagulation
anti-coagulation, management of, during cardiopulmonary bypass [Urban, Gordon, Farrell, Shaffer], A437
bedside PT and PTT monitor, clinical validation of [Reich, DePerio], A430
blood loss and patterns of, influence of aprotinin on, in infants undergoing surgery for congenital heart defects [Mossinger, Dietrich, Spannagel, Jochum, Richter], A77
calculating protamine heparin reversal ratio [Murray, Hampton, Hargovan, Wright], A62
cephapirin-induced, assessment of duration of abnormalities as measured by thromboelastograph [Baeuerle, Mongan, Hoskin], A70
comparison of ACT and TEG in patients receiving autologous platelet-rich-plasma during cardiac surgery [Wong, Jones, Wade], A434
comparison of thromboelastography and platelet aggregometry [Tuman, McCarthy, Patel, Patel, Ivankovich], A433
consumptive, as predictor of outcome in purpura fulminans [McManus, Chruchwell], A286
correlation between prothrombin time and degree of isovolemic hemodilution [Mortelmans, Vermaut, Mulier, Van Aken], A429
defects in, in neonates during CPB [Kern, Morana, Sears, Hickey], A63
desmopressin does not decrease bleeding after aspirin [Horrow, Van Riper, Parmet, Osborne], A985
does anesthetic technique affect hemostasis after cardiac surgery? [Salmenpera, Kuitunen, Hynynen, Heinonen, Fyhrquist], A74
does low-dose aprotinin reduce blood loss following cardiopulmonary bypass? [Benmosbah, Madi, Castel, Kiefer, Cousin], A983
effect of aprotinin on fibrinolysis during orthotopic liver transplantation [Tartiere, Deshayes, Samba, Le Querrec, Gerard], A218
effects of protamine on ACT and antithrombin III-heparin complex during cardiac surgery [Inada, Aoki, Kohama, Aoki, Takanashi, Iwahashi, Furuta], A78
effects of protamine on vascular smooth muscles of human mesenteric artery [Akata, Kodama, Matsuyama, Takahashi, Yoshitake], A75
evaluation of intraoperative monitoring of prothrombin time and activated partial thromboplastin time with new compact monitor [Samama, Faure, Riou, Ankri, Arock, Guillosson, Viars], A438
fibrin formation during CPB with and without circulatory arrest in operations of congenital heart diseases [Dietrich, Spannagl, Mossinger, Richter], A76
during liver transplantation, implications for: hepatic regulation of fibrinolysis [Kelley, Bissell], A565
low dose aprotinin or tranexanic acid treatment in cardiac surgery [Isetta, Samat, Kotaiche, Jourdan, Grimaud], A80
modification of hemostatic parameters during cardiopulmonary bypass: effects of high-dose aprotinin [Gardaz, Hauert, Chassot, Parise, Bernath, Bachmann], A991
natural anti-coagulant levels following major vascular surgery [Gibbs, Crawford, Michalopoulus], A72
perioperative rheological and fibrinolytic changes [Janvier, Freyburger, Winnock, Bosseau, Erny], A79
post-bypass bleeding, prevention of, with cyklokapron and amicar [Karski, Teasdale, Carroll, Glynn], A275
postoperative hypercoagulability, effect of epidural blockade on [Gibbs, Crawford, Michalopoulus], A714
predicting bleeding in CPB patients, sensitivity and specificity of APTT and PT by portable laser photometer in [Nuttall, Oliver, Beynen, Nichols], A431
predilution and titrated inhibition of platelet aggregation: principle for hemofiltration in immediate postoperative period [Hodl, Chiari, Muller, Legat, Zimpfer], A436
skin tests correlation with antibodies to protamine [Horrow, Levit, Freeland, Began, Henry], A61
studies in parturient: how do we practice? [Voulgaropoulos, Palmer], A1073
thromboelastographic fibrinolysis does not correlate with levels of D-dimers after cardiopulmonary bypass [Whitten, Allison, Latson, Elmore, Gulden, Burkhardt, Hyndman], A432
what dose of tranexamic acid is optimally hemostatic? [Horrow, Van Riper, Parmet, Whooley], A986
whole blood clotting analysis, effect of delay and storage on, as determined by thromboelastography [Rocke, Orlikowski, Murray], A428
erythrocytes
In Vivo survival studies after in-line microwave warming [Connolly, Allen, Ramberg, Grabowy, Carr, Schwaitzberg], A1115
flow
dorsal aortic, effect of halothane and isoflurane on, in stage 24 chick embryo [Wojtczak, Hu, Clark], A561
mesenteric venoconstriction in response to celiac ganglion stimulation, role of $\alpha$-adrenoceptor subtype during [Tominaga, Stekiel, Bosnjak, Kampine], A570
organ, effect of brain death on [Ali, Gelb], A210
peripheral and cerebral hemodynamic effects of epidural anesthesia in newborn lambs [Yaster, Koehler, Traystman], A918

## hemodilution

during bone marrow harvest in children as means of avoiding homologous blood transfusion [Perez de Sa, Bekassy, Schou, Werner], A1052
cardiac compensation during, effect of coronary stenosis on [Crystal, Levy, Eckel, Kim, Chavez], A516
critical level of, in myocardium with compromised coronary blood flow: study on regional function and retransfusion [Spahn, Smith, Menius, McRae, Veronee, Leone], A517
isovolemic, degree of, correlation between prothrombin time and [Mortelmans, Vermaut, Mulier, Van Aken], A429
isovolemic, supply-dependent oxygen consumption and mixed venous oxyhemoglobin saturation during, in pigs [Rasanen], A260
isovolemic, with $6 \%$ hydroxyethyl starch during elective total hip replacement, increased homologous blood requirement after (Singelyn, Gouverneur], A73
low postoperative hematocrit associated with cardiac ischemia in high-risk patients [Christopherson, Frank, Norris, Rock, Gottlieb, Beattie], A99
normovolemic, rationale for, day before surgery [Maurette, Napolitano, Gadrat, Ph Dieu, Macouillard], A906
preoperative normovolemic, by TEE in coronary artery disease, evaluation of effects of [Catoire, Saada, Gormezano, Pichaud, Bonnet], A106
heparin
calculating protamine heparin reversal ratio [Murray, Hampton, Hargovan, Wright], A62

## leukocytes

cardiac surgical patients plasma enhances oxygen free radical production in neutrophils [Nakamura, Bonventre, Inada, deBros, Shibata, Kono, Philbin], A95
CPB induces increased leukocyte adhesion receptors but not TNF-a [Rinder, Mathew, Bonan, Hines, Smith], A59
human polymorphonuclear, adenosine inhibits oxygen free radical production of, by action as calcium antagonist [Thiel, Bardenheuer], A1016
human polymorphonuclear, superoxide anion production of, potentiation of adenosine by pentoxifylline in inhibition of [Thiel, Becker, Bardenheuer], A230
intracellular antioxidant defenses and redox state, halothanemediated changes in [Yousif, Shayevitz, Varani], A999
neutrophil suppression with halothane and isoflurane using flow cytometry [Goolishian, Circeo, Teres, Boldt, Hall], A285
pentobarbital inhibits $\mathrm{Ca}^{2+}$-sensitive secretion in basophils [Robinson-White], A994
platelet-leukocyte binding on cardiopulmonarybypass [Rinder, Mathew, Bonan, Smith], A58
pulmonary production of tumor necrosis factor during halothane anesthesia in mice [Knight, Tait, Davidson, Remick, Johnson], A997
In Vivomodulation of human neutrophil function by pentoxifylline in septic patients [Oismuller, Mayer, Steltzer, Michsche, Hammerle], A233
loss
coagulation patterns and, influence of aprotinin on, in infants undergoing surgery for congenital heart defects [Mossinger, Dietrich, Spannagel, Jochum, Richter], A77
does low-dose aprotinin reduce blood loss following cardiopulmonary bypass? [Benmosbah, Madi, Castel, Kiefer, Cousin], A983
platelet function following surgery involving [Gibbs, Crawford, Michalopoulas], A71
lymphocytes
herpes simplex virus-specific cytotoxic T lymphocyte function, effect of morphine on; possible mechanism involved in HSV recurrent infection following epidural morphine administration [Bonneau, Sheridan, McDonald, Glaser], A590
natural killer cell simulation with interferon $a / b$, halothane and isoflurane induced inhibition of [Markovic, Murasko, Knight], A996
T-cell subsets and antigen-presenting accessory cells, differential effect of isoflurane on, In Vitro [Grun, Maurer, Torjman, Schieren, Maurer], A1000

## plasma

fresh frozen, administration of, to patients with end-stage liver disease, ionized calcium levels during [Washington, Prager, Kelley, White, Cauldwell], A277
platelets
aggregation, predilution and titrated inhibition of: principle for hemofiltration in immediate postoperative period [Hodl, Chiari, Muller, Legat, Zimpfer], A436
aggregometry, comparison of thromboelastography and [Tuman, McCarthy, Patel, Patel, Ivankovich], A433
autologous platelet-rich-plasma, comparison of ACT and TEG in patients receiving, during cardiac surgery [Wong, Jones, Wade], A434
function, evaluation of, during autologous blood donation [Harris, Rinder, Bonan, Hines], Al121
function of, following surgery involving blood loss [Gibbs, Crawford, Michalopoulas], A71
interaction of, with coronary circulation, effect of halothane on [Gobeil, Blaise, Tanguay], A519
platelet-leukocyte binding on cardiopulmonary bypass [Rinder, Mathew, Bonan, Smith], A58
platelet-rich plasmapheresis during cardiac reoperations [Reich, Koorn, Vitale, DePerio, Silvay], A987
release of 5 -hydroxytryptamine and thromboxane A2 from, inhibited by halothane and isoflurane, in humans [Blaise, Buluran], A520
protamine
calculating protamine heparin reversal ratio [Murray, Hampton, Hargovan, Wright], A62
effects of, on ACT and antithrombin III-heparin complex during cardiac surgery [Inada, Aoki, Kohama, Aoki, Takanashi, Iwahashi, Furuta], A78
effects of, on vascular smooth muscles of human mesenteric artery [Akata, Kodama, Matsuyama, Takahashi, Yoshitake], A75
skin tests correlation with antibodies to protamine [Horrow, Levit, Freeland, Began, Henry], A61
stored
evaluation of platelet function during autologous blood donation [Harris, Rinder, Bonan, Hines], Al121

## volume

intraoperative hypovolemia, hypertonic saline dextran resuscitation of, less net volume loading with [Anaya, Drace, Myers, Kramer], Al122
regional, effects of vasopressin on, in supine humans [Hopf, Klement, Stuhmeier, Wust, Peters], A160
Blood flow. See also under Brain; Kidney; Liver; Lung; Measurement techniques;
Skin vital organ, during deliberate hypotension [Kick, van Aken, Wouters, Verbesselt, an Hemelrijck], A625
Blood flow, myocardial. See under Heart
Blood pressure. See also under Measurement techniques; Monitoring
hemodynamic instability, are there any rules used for definition of: medical decision making [East, Henderson, Pace, Morris, Brunner], A1059
hypertension
effect of succinylcholine, hypercapnia and, in experimental osteofascial compartment syndrome [Varlotta, DiPasquale], A816
post CABG, left ventricular systolic and diastolic function during treatment of [Davies, Karski, Teasdale, Ivanov, Young, Weisel], A145
preoperative, prognostic importance of [Helman, Browner, Li, Mangano, SPI Research Groupl, A110
measurement
comparison of arterial tonometry with radial artery catheter in, in anesthetized patients [Siegel, Brodsky, Bhatia, BrockUtne], A424
physiologically-based oscillometric method [Sun, Clark], A425 preoperative, a poor indicator of diurnal variation [Fleisher, Rosenbaum, Barash], A103
monitoring
noninvasive superficial temporal artery blood pressure, [Baker, Westenskow], A460
propofol-induced arterial compliance increase accounts for systolic arterial pressure decrease [Dupuy, Schurando, Payen], A144
Body temperature. See under Temperature
Brachial plexus anesthesia. See under Anesthetic techniques, regional
Bradykinin. See under Pharmacology

## Brain

actual temperature of, during deep hypothermia, recorded at standard monitoring sites [Stone, Young, Smith, Solomon, Ostapkovich, Wang], A483
anoxia
chemical, in neuronal cell line, elevated cytosolic $\mathrm{Ca}^{2+}$ does not mediate cell death from [Johnson, Uhl, Gores, Sill], A612
effect of brain reperfusion strategy on cerebral blood flow and metabolism after total circulatory arrest in children [Greeley, Mault, Baldwin, Stockwell, Reves, Ungerleider], A966

## blood flow

during adenosine-induced hypotension in human [Lam], A173
alteration by halothane and isoflurane of reactivity to PGF2a in human cerebral arteries [Reinstrup, Uski, Messeter], A200
attenuating canine cerebral artery contractions, halothane exhibits agonist specificity in [Martin, Sill, Nelson], A541
canine cerebral arteries, effect of halothane and isoflurane on, In Vitro [Brian, Kennedy], A615
cerebral; changes in EEG and cerebral blood flow velocity and, with repeated propofol infusions in dogs [Kochs, Cunningham, Hoffman, Werner, Albrecht, Schulte am Esch], A617
cerebral microvascular effects of fentanyl, sufentanil, and alfentanil in piglets [Monitto, Kurth], A542
cerebral perfusion absent during extremes of low-flow cardiopulmonary bypass [Burrows, Bissonnette], A947
cerebral perfusion mapping with ultrasound contrast [Rampil], A1006
cerebral vasodilator, nitrous oxide as? [Lu, Gibson, Monell, Frost, Goldiner], A539
cerebral vasoreactivity, increased by estrogen withdrawal [Shay, Futo, Block, Badrov, Thisted, Moss], A540
changes in, during isoflurane anesthesia, monitored by transcranial Doppler sonography [Werner, Hoffman, Kochs, Schulte am Esch, Albrecht], A616
comparative effects of desflurane and isoflurane on [Ornstein, Young, Ostapkovich, Prohovnik, Stein], A209
distribution, effects of sevoflurane and isoflurane on, in rats [Habazetu, Conzen, Vollmar, Peter, Messmer], A549
effect of brain reperfusion strategy on, after total circulatory arrest in children [Greeley, Mault, Baldwin, Stockwell, Reves, Ungerleider], A966
effect of dexmedetomidine on cerebrovascular response to hypoxia during isoflurane anesthesia [McPherson, Traystman], A174
effect of fentanyl and sufentanil on, in rabbits with acute cryogenic brain injury [Sheehan, Scheller, Zornow, Peterson], A618
effect of methylparaben and propylparaben on [Gignac, Gelb, Manninen, Farrar, Lee], A196
effect of $\mathrm{PaCO}_{2}$ on, during halothane versus isoflurane anesthesia, in rat [Young, Barkai, Prohovnik, Nelson, Durkin], A170
effect of succinylcholine on, in patients with neurologic disorders [Kovarik, Lam, Slee, Mathisen], A207
endothelium-dependent vascular relaxation, regional changes in, in diabetic rat [Pelligrino, Albrecht], A547
human $\mathrm{CBF}-\mathrm{CO}_{2}$ : responsiveness maintained during propofolnitrous oxide anesthesia [Fox, Gelb, Manninen, Farrar], A169
hypercapnic reactivity, blunted by hypoglycemia in piglets [Jacques, Kirsch, Traystman], A545
hypocapnia-induced contraction of isolated dog cerebral artery more susceptible to halothane than pentobarbital [Hatano, Nakamura, Toda, Nishiwada, Mori], A548
impaired by rewarming injury, after hypothermic CPB [Johnston, Vinten-Johansen, DeWitt, Stump, Prough], A543
influence of pH -management of mean blood flow velocity in middle cerebral artery during hypothermia cardiopulmonary bypass [Vannelli, Murkin, Lee], A56
middle cerebral artery blood flow velocity, carbon dioxide affect on, during general anesthesia [Pashayan, Mahia, Richards], A172
modulation by $\mathrm{CO}_{2}$ and $p \mathrm{H}$ of reactivity to PGF2a in human cerebral arteries [Reinstrup, Uski, Messeter], A199
nitrous oxide is more potent cerebrovasodilator than isoflurane in humans [Lam, Slee, Cooper, Bachenbert, Mathisen], Al68
not improved by hypertonic saline, after experimental head injury and hemorrhage in cats [Prough, DeWitt, Taylor, Deal, Vines], A544
preserved coupling of CNS metabolism and, during halothane anesthesia [Szabo, Crosby], A614
response to alfentanil in humans [Slee, Lam, Winn, Laohaprasit], Al71
role of adenosine in, increases during hypoglycemia versus hypoxia in rat [Pelligrino, Albrecht, Hoffman], A546
vasopressin dilates cerebral arteries in fetal sheep [Tong, Eisenach], A819
velocity of, is coupled to EEG activity during hypothermic cardiopulmonary bypass [Walker, Isley, Lucas, Kafer], A177
carbon dioxide tension
effect of $\mathrm{PaCO}_{2}$ on cerebral blood flow distribution during halothane versus isoflurane anesthesia, in rat [Young, Barkai, Prohovnik, Nelson, Durkin], A170
human $\mathrm{CBF}-\mathrm{CO}_{2}$ : responsiveness maintained during propofolnitrous oxide anesthesia [Fox, Gelb, Manninen, Farrar], A169
indomethacin reduction of, in patients with cerebral disorders [Taeishi, Sadamitsu, Soejima, Maekawa, Sanuki, Matsumoto, Nakashima], A188
middle cerebral artery blood flow velocity during general anesthesia [Pashayan, Mahla, Richards], A172
modulation by $\mathrm{CO}_{2}$ and $p \mathrm{H}$ of reactivity to PGF2a in human cerebral arteries [Reinstrup, Uski, Messeter], A199
Cfos and jun-B messenger RNA, differential effects of pentobarbital and halothane on [Marota, Crosby, Uhl], A647
death, effect of, on organ blood flow [Ali, Gelb], A210
diethyl ether enhances GABA-gated chloride flux by allosteric mechanism [Quinlan, Firestone], A1034
efficient cooling of, conventional monitoring is poor correlate of [Kern, Jonas, Mayer, Hanley, Castenada, Hickey], A57

## electroencephalography

accuracy of, in predicting movement at incision during isoflurane anesthesia [Sebel, Bowles, Saini, Chamoun], A446
bispectral analysis of, may predict anesthetic depth during narcotic induction [Kearse, Saini, deBros, Chamoun], A175
cerebral blood flow velocity is coupled to, during hypothermic cardiopuimonary bypass [Walker, Isley, Lucas, Kafer], A177
changes in cerebral blood flow and cerebral blood flow velocity and, with repeated propofol infusions in dogs [Kochs, Cunningham, Hoffman, Werner, Albrecht, Schulte am Esch], A617
characteristics of emergence from propofol/sufentanil total intravenous anesthesia [Traast, Kalkman], A184
coherence analysis of, during isoflurane anesthesia [Levy, Canals-Curtis], A178
correlated multiple-wavelength monitoring of localized cerebrocortical NADH and brain microvessel hemoglobin $\mathrm{O}_{2}$ saturation [Rampil, Litt, Mayevsky], A447
does not predict movement in response to surgical incision at 1.0 MAC isoflurane [Dwyer, Rampil, Eger, Bennett], A1025
effect of succinylcholine on, in patients with neurologic disorders [Kovarik, Lam, Slee, Mathisen], A207
effects of propofol compared to methohexital [Reddy, Moorthy, Mattice, Dierdorf, Dietsch], A182
epileptiform activity, not caused by propofol [Mahla, Grundy, Schmidt, Richards, Mixson], A183
epileptiform activity of narcotic anesthesia during carotid endarterectomy, prevalence of [Kearse, McPeck], A1029
four channel density spectral array does not reliably detect mild cerebral ischemia during carotid endarterectomy [Kearse, Martin, McPeck], A1028
isoflurane at depths producing burst-suppression pattern in, hemodynamic response to intubation not attenuated by [Spackman, Messick, Sharbrough], A355
pancuronium potentiates EEG effect of isoflurane in dogs [Schwartz, Navedo, Berman], A792
power spectrum changes during propofol sedation [Veselis, Reinsel, Marino, Wronski], Al81
prediction, of arousal during anesthesia with combinations of isoflurane, fentanyl, and $\mathrm{N}_{2} \mathrm{O}$ [Dutton, Smith, Smith], A448
regional, response to induction of high-dose fenatnyl anesthesia evaluated by new brain function monitoring system [Ochiai, Koitabashi, Toyoda, Fukushima], A445
spectral activity: objective index of postoperative pain in infants [Meyer, Jayais, Bensouda, Mayer, Barrier], A1026 etomidate modulation of central GABAA-receptor gated current [Yang], A578
evoked potentials
auditory, to pitch change during sufentanil anesthesia [Plourde, Joffe], A449
cortical magnetic motor, effect of enflurane, halothane, isoflurane and nitrous oxide on [Sloan, Levin], A450
monitoring, automated flash visual, intracranial pressure compared with [Hyman, Xu, King, Smith], A205
motor, by transcranial magnetic stimulation, effect of neuroleptanalgesia on, in primates [Ghaly, Stone, Kartha, Asokan, Alexander], A595
motor and somatosensory, comparative analysis of enflurane dose-effect on, in primate [Ghaly, Kartha, Stone, Krinsky, Asokan, Alexander], A613
motor evoked responses to transcranial electrical or magnetic stimulation, effects of propofol, etomidate, midazolam, and fentanyl on, in humans [Kalkman, Drummond, Ribberink, Patel, Sano, Bickfor], A1024
neurogenic motor, are predictive of neurologic function in porcine model of aortic occlusion [Mongan, Peterson], Al123
neurogenic motor, effect of intravenous anesthetics on, recorded at spinal and sciatic level [Peterson, Mongan], A179.
spinal and cortical, for innocuous and noxious electrical stimuli, component-specific and naloxone reversible effects of fentanyl on, in rabbit [Lee], A652
transcranial magnetic motor evoked potentials, effect of anesthetic agents on, in neurosurgical patients [Losasso, Boudreaux, Muzzi, Cucchiara, Daube], A1032
GABA-gated chloride flux enhanced by halothane, in mice selectively bred for sensitivity to diazepam [Quinlan, Winter, Gallaher, Firestone], A582
general anesthetic effects on protein kinase C activity are sub-strate-dependent [Firestone, Gray, Firestone], A1042
hippocampus
cultured rat hippocampal neurons, three volatile anesthetics enhance GABA-activated chloride currents in, at clinically relevant concentrations [Harrison, Jones, Brooks], A1040
GABA-mediated inhibitory postsynaptic currents at synapses between cultured rat hippocampal neurons prolonged by clinical concentration of three volatile anesthetics [Jones, Hornberger, Harrison], A580
methohexital and volatile anesthetics reduce depolarization-induced calcium entry into cultured rat hippocampal neurons [Bleakman, Jones, Roback, Hornberger, Radke, Miller, Harrison], A583
propofol improves electrophysiological recovery after anoxia in, in rat [Rosenberg, Kass, Cottrell], A606
sodium levels in, thiopental and tetrodotoxin have similar effects on, in rat [Abramowicz, Kass, Cottrell], A607
hypoxia
comparison of cerebral protective effects of isoflurane and mild hypothermia in model of incomplete forebrain ischemia [Sano, Patel, Drummond, Grafe, Cole], A602
focal cerebral ischemia, effects of MK-801 on cerebrai regional oxygen consumption in [Chi, Anwar, Sinha, Weiss], A609
four channel density spectral array does not reliably detect mild cerebral ischemia during carotid endarterectomy [Kearse, Martin, McPeck], A1028
incomplete cerebral ischemia, dexmedetomidine improves outcome from, in rat [Hoffman, Kochs, Werner, Albrecht], A608
inhalational anesthetics decrease central catecholamine activity and improve ischemia outcome [Hannigan, Lingamneni, Miletich, Albrecht], A604
ischemic-hypoxia injury in cultured neurons and astrocytes measured by dye technique [Juurlink, Sochocka, Hertz, Shuaib, Cole], A610
ischemic-hypoxia injury in cultured neurons and astrocytes measured by LDH release [Sochocka, Shuaib, Code, Hertz], A642
during isoflurane anesthesia, effect of dexmedetomidine on cerebrovascular response to [McPherson, Traystman], A174
ketamine improves outcome from incomplete cerebral ischemia, in rats [Hoffman, Pelligrino, Albrecht], A605
oxygen-glucose deprivation, extracellular alkalosis exacerbates injury of cortical neurons due to [Giffard, Choi], A611
propofol improves electrophysiological recovery after anoxia in rat hippocampal slice [Rosenberg, Kass, Cottrell], A606
sevoflurane reduces neurologic deficit following incomplete ischemia in rats [Werner, Kochs, Hoffman, Mollenberg, Schulte am Esch], A603
intracranial pressure
automated flash visual evoked potential monitoring compared with [Hyman, Xu, King, Smith], A205
brain water, brain relaxation and,: comparison of mannitol and furosemide [Schubert, Awad, Perez-Trepichio, Ebrahim, Bloomfield], A202
comparison of sodium nitroprusside and labetalol in, in cats [Thiagarajah, Lear, Azar, Talavera], A619
correlation between electrocardiographic changes and intracranial blood following subarachnoid hemorrhage [Arya, Mannien, Gelb, Pelz], A176
effect of fentanyl and sufentanil on, in rabbits with acute cryogenic brain injury [Sheehan, Scheller, Zornow, Peterson], A618
effect of succinylcholine on, in patients with neurologic disorders [Kovarik, Lam, Slee, Mathisen], A207
elevated, during routine endotracheal suction, effects of atracurium on [Klezl, Werba, Illievich, Schramm, Spiss], A211
hypertonic, hyperoncotic hydroxyethyl starch decrease in, following neuro trauma [Weinstabl, Mayer, Germann, Steltzer, Hammerle], A201
indomethacin reduces carbon dioxide-induced elevation of, in patients with cerebral disorders [Taeishi, Sadamitsu, Soejima, Maekawa, Sanuki, Matsumoto, Nakashima], A188
neurological status and brain edema unaffected by high quantity glucose and fluid administration, following closed
cranial injury in rats [Shapira, Artru, Cotev, MuggiaSulam, Freund], A204
not reduced by hypertonic saline, after experimental head injury and hemorrhage in cats [Prough, DeWitt, Taylor, Deal, Vines], A544
protective effect of ketamine following closed cranial impact in rats [Shapira, Artru, Lam], A203
significant increase in, with sufentanil and fentanyl, in resuscitated head trauma patients [Bailey, Sperry, Reichman, Peterson, Petersen, Pace, Stanley], A198
ischemia
forebrain, regional recovery of eicosanoids after, by microdialysis, in rats [Patel, Drummond, Mitchell, Yaksh, Cole], A628
locus ceruleus, mediating role of $\alpha 2$ adrenoceptors in, for hypnotic response to dexmedetomidine, in rats [CorreaSales, Rabin, Maze], A635
metabolism
brain dead patients, oxygen delivery and consumption in [Mateo, Langeron, Pansard, Arthaud, Cohen, Viars], A259
comparison of cerebral protective effects of isoflurane and mild hypothermia in model of incomplete forebrain ischemia [Sano, Patel, Drummond, Grafe, Cole], A602
correlated multiple-wavelength monitoring of localized cerebrocortical NADH and brain microvessel hemoglobin $\mathrm{O}_{2}$ saturation [Rampil, Litt, Mayevsky], A447
effect of brain reperfusion strategy on, after total circulatory arrest in children [Greeley, Mault, Baldwin, Stockwell, Reves, Ungerleider], A966
ischemic-hypoxia injury in cultured neurons and astrocytes measured by LDH release [Sochocka, Shuaib, Code, Hertz], A642
preserved coupling of CNS blood flow and, during halothane anesthesia [Szabo, Crosby], A6i4
response to alfentanil in humans [Slee, Lam, Winn, Laohaprasit], A171
synaptosomal membranes, saturable binding of halothane to, in rat [El-Maghrabi, Echenhoff, Shuman], A373
synaptosomes, enhancement of enzymatic phospholipid Nmethylation during anesthesia with isoflurane, in rat [Franks, Sastry, Surber, England], A338
middie cerebral artery, estimation of embolic air volume in, using transcranial sonography [Bunegin, Wahl, Albin], A471
oxygen consumption
in focal cerebral ischemia, effects of MK-801 on [Chi, Anwar, Sinha, Weiss], A609
oxygenation
correlated multiple-wavelength monitoring of localized cerebrocortical NADH and brain microvessel hemoglobin $\mathrm{O}_{2}$ saturation [Rampil, Litt, Mayevsky], A447
noninvasive measurement of, with near-infrared spectroscopy, influence of tissue layers on [Snyder, Williams, Brem, Eleff, Norris, Hanley], A208
potassium homeostasis preserved by isoflurane, during induced hypotension and hypocapnia, in rats [Waaben, Kaiser, Rossen, Lundbaek, Husum, Hansen], A620
response of human CNS sodium channels to midazolam [Frenkel, Urban], A646

## synapses

intercellular communications between astrocytes differentially affected by general anesthetics [Mantz, Cordier, Desmonts, Giaume], A581
Bretylium. See under Sympathetic nervous system, pharmacology Brifentanyl: See under Analgesics
Bronchus. See under Luing
Bupivacaine. See under Anesthetics, local
Buprenorphine. See under Analgesics

Burns. See under Complications
Butamben. See under Anesthetics; local

Calcitonin. See under Pharmacology
Calcium. See under Ions

## Cannulation. See under Arteries; Veins, jugular

Capsaicin. See under Pharmacology
Carbon dioxide. See also under Monitoring
effect of changes in, on matching of ventilation and perfusion in normal lungs [Domino, Eisenstein, Lu, Swenson, Hiastala], A128

## hypercarbia

coronary small artery constriction and simultaneous arteriolar dilation during [Habazettl, Conzen, Vollmar, Adili, Muller, Peter], A526
effect of succinylcholine, hypertension and, in experimental osteofascial compartment syndrome [Varlotta, DiPasquale], A816
hypercapnic cerebral blood flow reactivity blunted by hypoglycemia in piglets [Jacques, Kirsch, Traystman], A545.
increases $\dot{\mathrm{V}}_{\mathrm{A}} / \dot{\mathrm{Q}}$ heterogeneity in canine oleic acid lung injury [Domino, Eisenstein, Lu, Hlastala], A235
respiratory sensitivity to, after brifentanyl [Cigada, Afifi, Glass, Esposito, Camporesi], A1097
succinylcholine increases $\mathrm{PeTCO}_{2}$ in dose dependent manner [van der Spek], A300

## hypocarbia

contraction of isolated dog cerebral artery induced by, more susceptible to halothane than pentobarbital [Hatano, Nakamura, Toda, Nishiwada, Mori], A548
effect of hyperventilation on tympanic membrane temperature as measured by infrared scanning [Romanelli, Hiestand, Howie, Wert], A482
hyperventilation reduces skin blood flow and transcutaneous oxygen in extremities [Barker, Hyatt, Clarke], A409
increases $\dot{V}_{A} / \dot{Q}$ heterogeneity in canine oleic acid lung injury [Domino, Eisenstein, Lu, Hlastala], A235
induced, isoflurane preserves brain potassium homeostasis during, in rats [Waaben, Kaiser, Rossen, Lundbaek, Husum, Hansen], A620
influence of moderate hypocapnia on pulmonary vascular tone following mitral valve replacement [Mahdi, Salem, Joseph, Paulissiañ, Hernandez], A166
measurement
relationship between end-tidal and arterial carbon dioxide in neurointensive care patients [Russell, Graybeal], A197

## monitoring

colorimetric end-tidal carbon dioxide detector in children, validation of [Kelly, Wilhoit, Brown, Case], A946
continuous and accurate end-tidal $\mathrm{CO}_{2}$ and anesthetic concentration measurements at [Perkins, Marsh], A486
new endotracheal tube connector for sampling end-tidal $\mathrm{CO}_{2}$ in infants [Halpern, Bissonnette], A930
pulse oximetric and capnographic, reliability of, during laparoscopic surgery for cholecystectomy [Nyarwaya, Samii, Mazoit, De Watteville], A453
in recovery room after general anesthesia [Melnyk, Cohen, Kan, Perpich], A902
transcutaneous $\mathrm{CO}_{2}$ monitoring, at 420 C probe temperature shows good correlation with arterial Pc Q, in SICU patients [Weir, Wong, Tremper, Zaccari, Daves, Patel], A493
tension
veno-arterial gradients for $\mathrm{PCO}_{2}$ and pH reflect tissue hypoxia during hemorrhagic shock in dogs [Vanderlinden, Gilbart, Paques, Bakker, Vincent]; A236

## ventilatory response

$\mathrm{CO}_{2}$ response curve displacement, read rebreathing technique may not accurately reflect drug-induced changes in [Gross, Weller, Conard, Smith], A1094
$\mathrm{CO}_{2}$ responses of inspiratory and expiratory bulbospinal neurons and phrenic nerve activity, dose-dependent effects of halothane on, in dogs [Stuth, Tonkovic-Capin, Zuperku, Kampine], A1096
effects of $\mathrm{CO}_{2}$ insufflation during laparoscopic cholecystectomy [Joris, Ledoux, Honore, Lamy], A121
during ventilatory failure due to Guillain-Barre and myasthenia gravis [Borel, Teitelbaum, Nichols, Hanley, Traystman], A254

## Carbon dioxide tension. See under Brain

Carbon monoxide. See under Gases, nonanesthetic
Cardiac massage. See under Heart
Cardiac output. See under Measurement techniques
Cardiovascular anesthesia. See under Anesthesia
Cardiovascular surgery. See under Surgery
Carotid endarterectomy, See underSurgery

## Catheters. See under Equipment

Caudal anesthesia. See under Anesthetic techniques, epidural
Celiac plexus. See under Sympathetic nervous system
Cells
metabolism
calcium channel antagonist action, vasodilation by, produced by propofol [Chang, Lacy, Davis], A553
cytosolic $\mathrm{Ca}^{2+}$ increase and contraction in vascular smooth muscle of rat aorta, inhibitory effect of halothane and isoflurane on [Tsuchida, Notsuki, Yamakage, Fujita, Namiki], A531
direct arteriolar and venular dilating effects of various vasoactive agents [Chen, Chang, Guth], A564
EDRF or other cyclic GMP mediated mechanisms, isoflurane does not vasodilate rat thoracic aortic rings by [Brendel, Proctor, Johns], A534
EDRF synthase activity, mechanism of inhibition of, by high and low oxygen tensions [Johns, Rengasamy], A538
endothelial cell calcium mobilization altered by volatile anesthetics [Loeb, O'Brien, Longnecker], A533
endothelial cells, $\mathrm{Ca}^{2+}$ exchange in, differential effects of halothane and isoflurane on [Shayevitz, Williams, Varani], A1001
endothelium-dependent circulatory control In Vivo, influences of halothane and isoflurane on [Greenblatt, Loeb, Longnecker], A532
etomidate produces vasodilation by mixed endothelium-dependent and independent mechanisms [Dozaki, Chang, Davis], A537
halothane may suppress action of G-protein, Gp, in endothelial cells [Robinson-White, Kobayashi], A995
interaction between nitric oxide and norepinephrine vasoconstriction in anesthetized rabbits [Losser, Lenfant, Pastor, Teisseire, Payen], A562
intracellular antioxidant defenses and redox state, halothanemediated changes in [Yousif, Shayevitz, Varani], A999
isoflurane and halothane inhibit vascular cell signalling independent of G-proteins [Sill, Uhl, Eskuri], A528
isoflurane inhibits endothelim-dependent relaxation and cyclic GMP formation in rat aorta [Nakamura, Hatano, Toda, Mori], A530
isoflurane inhibits signal transduction in cultured vascular smooth muscle cells [Eskuri, Sill, Van Dyke, Uhl], A529
Cepharpirin. See under Pharmacology
Cerebrospinal fluid
composition
elevated endothelin-1 level in, of patients with subarachnoid hemorrhage [Shirakami, Magaribuchi, Saito, Nakao, Mori], A191
pressure
effect of desflurane and isoflurane with $\mathrm{N}_{2} \mathrm{O}$ on, in patients with supratentorial mass lesions [Muzzi, Daltner, Losasso, Weglinski, Milde], A167
Chloroprocaine. See under Anesthetics, local
Cholinesterase. See under Enzymes
Chronic pain. See under Pain
Clonidine. See under Sympathetic nervous system, alphaadrenergic agonists
Coagulation. See under Blood
Cocaine. See under Anesthetics, local
Community education. See under Education
Complications. See also under Intubation, tracheal; Transfusion; Veins, jugular
acute exacerbation of carpal tunnel syndrome following radial artery cannulation [Martin, Mineo, Sharrock, Sobel], A473
anesthetic critical incidents analyzed using cognitive science techniques [Cook, Woods, McDonald], A865
anesthetic morbidity in congenital heart disease patients undergoing non-cardiac surgery [Strafford, Henderson], A1056
anesthetic morbidity in congenital heart disease patients undergoing outpatient surgery [Strafford, Henderson], A866
angle of incidence of 9.0 -French, high-volume infusion introducer sheaths and relative perforating potential [Carter, Blackshear, Gravenstein], A1008
aspiration
cricoid pressure in infants revisited [Moynihan, Brock-Utne], A932
is coloscopic preparation with oral polyethyleneglycol 2 hours before general anesthesia safe in ambulatory patients? [Mahiou, Narchi, Gory, Veyrac, Germond, Bazin], A1108
prophylaxis, oral famotidine for, in surgical outpatients [Solanki, Talke], A908
ranitidine and water increase gastric $p \mathrm{H}$ and decrease gastric residual volume in outpatients [Ross, Momany], A1110
autologous blood transfusion may induce secondary neuromuscular blockade in postoperative patients [Montefiore, Boico, Deghani, Bonnet, Zetiaoui], A795
burns
endotoxemia: reperfusion injury to airway? [Abdi, Traber, Herndon, Traber], A225
muscles under thermally-injured skin, resistance to atracurium in, in rat [Pavlin, Howard, Slattery], A779
severe, evaluation of gastric emptying in [Ho, Wang, Ho, Hu, Lin], A293
cauda equina syndrome, following continuous spinal anesthesia, explanation for: spinal model study of local anesthetic distribution [Rigler, Drasner], A703
convulsions
seizures following postdural puncture headache in postpartum women: series with suggested etiology [Shearer, Cunningham, Wallace, Giesecke], A852
diabetes
glycemic control and severity of surgery in [Raucoules, Lugrin, Ichai, Deloffre, Grimaud], A282
embolism
aeric microemboli and transcranial Doppler: episodic frequency and timing in open heart surgery [Albin, Hantler, Mitzel, Bunegin, Grover], A53
assessment of microembolization during cardiopulmonary bypass by transesophageal echocardiography [Calalang, Shapiro, Schwartz, Queeno, Shah, Hick, Meltzer], A64
in total hip arthoplasty, cemented versus noncemented [Weber, Ereth, Abel], A390
eye injury associated with anesthesia: closed claims analysis [Gild, Posner, Caplan, Cheney], A864
gastroesophageal injury, transesophageal echocardiography and [Hulyalkar, Ayd, Casella], A387
headache
post-dural puncture, theophylline for [Schwalbe, Schiffmiller, Marx], A1082
postdural puncture headache, incidence of, in obstetrical patients: comparing 24-gauge and 22-gauge Sprotte needles [Leeman, Sears, O'Donnell, Reisner, Jassy, Harmon, O'Donnell, Kelleher, Stanos], A853
postdural puncture headache, seizures following, in postpartum women: series with suggested etiology [Shearer, Cunningham, Wallace, Giesecke], A852
post-spinal headache after cesarean section, not reduced by spinal catheter [Blaise, Cournoyer, Perrauly, Bedard, Petit, Landry], A857
hematoma
elevated endothelin-1 level in cerebrospinal fluid of patients with subarachnoid hemorrhage [Shirakami, Magaribuchi, Saito, Nakao, Mori], A191
hypertension
fenoldopam in management of, evaluation of [Goldberg, Cantillo, Munoz, Nemiroff, Subramoni, Torjman, Vekeman, Davis], A49
postoperative hyperdynamic cardiovascular response following intracranial excision of arterial venous malformation [Porembka, Ebrahim, Bloomfield, Stuebing], A215
tourniquet, blocked by angiotensin-converting enzyme inhibition? [Heropoulos, Schieren, Seltzer, Bartkowski, Torjman, Lessin, Moody], Al58
interscalene block [Urban, McDonald, Urquhart, Sharrock], A733
lung
endotoxemia: reperfusion injury to airway? [Abdi, Traber, Herndon, Traber], A225
morbidity
anesthetic, associated with pharyngoplasty in children: five year review [Halpern, Roy], A933
Apache II disease category assignment: correlation with autopsy diagnosis [Gettinger, Wells, Rawnsley], A272
Apache II disease category assignment: variability and predicted mortality [Gettinger, Wells, Rawnsley], A273
ASA physical status and age predict morbidity following three surgical procedures [Cullen, Cleary, Guadagnoli, Chittenden], A872
perioperative mortality following total knee and hip arthroplas-ty-role of anesthesia care? [Sharrock], A868
mortality and morbidity of regional versus general anesthesia: meta-analysis [Sorensen, Pace], A1053
myasthenia gravis
ventilatory drive and $\mathrm{CO}_{2}$ response during ventilatory failure due to [Borel, Teitelbaum, Nichols, Hanley, Traystman], A254
myocardial infarction
incidence of, in patients with prior percutaneous transluminal coronary angioplasty [Gottlieb], A52
albuphine ameliorates pruritus caused by continuous epidural bupivacaine-fentanyl in postoperative patients [Newman, Dragisic, Lubenow, McCarthy, Ivankovich], A770
postoperative, not reduced by pulse oximetry: prospective study of 20,802 patients [Moller, Pedersen, Johannessen, Rasmussen, Espersen, Dyrlund, Jensen, Rasmussen, Ravlo, Chraemmer-Jorgensen, Djernes, Wiberg-Jorgensen, Cooper, Gravenstein, Johansen], A867
postoperative, when do they occur? prospective study of 20,802 patients [Johannessen, Jensen, Moller], A863

## radiation

exposure of anesthesiologists [Henderson, Lu, Rockoff, Strauss, Treves], A896
respiratory, risk factors for, after cardiac surgery [Higgins, Yared, Paranandi, Baldyga, Starr], A258
serum CK and CK-MB levels in cesarean section patients [Ross, Conrad, Mitruka, Baker], A862
shivering
comparative effects of clonidine and ketanserine on [Banache, Joris, Lamy], A51
during C-section, effect of epidural butorphanol and fentanyl on [Chen, Kwan], A843
thrombosis
deep venous prophylaxis by low molecular weight heparin [Melon, Keravel, Gaston, Huet, Combes, Neuronox Group], A214
risk of indwelling venous catheter in femoral position [Durbec, Albanese, Rouzaud, Granthil], A267
thrombotic risk of long-term radial artery cannulation, two different cannulae [Auffray, Martin, Lambert, Saux, Gouin], A892
trauma
rapid availability of blood for massive transfusion in trauma center: new approach using blood blocks [Coveler, Werch, Todd], A109
In Vitro assessment of amniotic fluid removal from human blood through cell saver processing [Thornhill, O'Leary, Lussos, Rutherford, Johnson], A830
Computerized tomography. See under Measurement techniques
Computers. See also under Equipment
artificial neural-networks systems, respiratory waveforms recognition with [Leon, Lorini], A492
automated computer-assisted anesthesia interview for outpatient anesthesia [Stead, Trentalange], A489
computer-aided assessment of refractoriness of neuromuscular transmission [Lee, Tsai, Lin], A805
computerized preanesthetic evaluation system, disease descriptors for [Jackson, Gibby, Gravenstein, Paulus], A495
demand controlled infusion of vecuronium [Gilly, Andel, Lackner, Sauberer, Foldes], A1009
IVA-SIM interactive program, to simulate intravenous anesthesia [Schuttler, Kloos], A329
manual versus automatic control in induction and maintenance of deliberate hypotension [Scanlon, Martin, Smith], A462
non-linear closed-loop controller for oxygenation based on clinically proven fifth dimensional quality surface [East, Tolle, McJames, Farrell, Brunner], A468
propofol infusion controlled by: comparison of three pharmacokinetic models [Viviand, Guidon-Attali, Lacarelle, Borsarelli, Francois], A313
versatile closed-loop system controlled by, for continuous infusion of muscie relaxants [Assef, Jones, Lennon, Burke, Behrens], A467
Congenital defects. See under Heart
Continuing education. See under Education
Continuous positive pressure. See under Ventilation
Contractility. See under Heart; Muscle, skeletal
Convulsions. See under Complications
Cooling. See under Temperature
Coronary occlusion. See under Heart
Corticosteroid hormones. See under Hormones
CP96345. See under Pharmacology
Cyclosporine. See under Pharmacology

Desflurane. See under Anesthetics, volatile
Desmopressin. See under Pharmacology
Dexmedetomidine. See under Sympathetic nervous system, alphaadrenergic agonists
Diabetes. See under Complications; Metabolism
Diaphragm. See under Muscle, skeletal
Diazepam. See under Anesthetics, intravenous; Hypnotics
Diethyl ether. See under Anesthetics, volatile
Dobutamine. See under Pharmacology
Dopamine. See under Pharmacology; Sympathetic nervous system, pharmacology
Doppler ultrasound. See under Measurement techniques
Dorsal horn ganglia. See under Spinal cord
Doxacurium. See under Neuromuscular relaxants
Dystrophy. See under Sympathetic nervous system

E
Echocardiography. See under Heart
Edema. See under Lung
Edrophonium. See under Antagonists, neuromuscular relaxants
Education
community
current anesthesia practice and training in retrobulbar nerve
blocks [Lubenow, Deutsch, Narbone, Ivankovich], A885
continuing
in critical care medicine, fourth year elective in [Rogers, Grenvik], A227
fiberoptic endoscopy training workshop, evaluation of: phase I [Randel, McDermott, Ovassapian], A883
residents
are anesthesia residency programs still failing to teach regional anesthesia? [Kopacz], A759
candidates' perceptions: residency program interviews [Rosenberg, Polonsky, Horrow, Padolina], A877
in critical care medicine, fourth year elective in [Rogers, Grenvik], A227
current anesthesia practice and training in retrobulbar nerve blocks [Lubenow, Deutsch, Narbone, Ivankovich], A885
does conference attended by, affect their test scores? [Polk, Wirtes], A878
fiberoptic endoscopy training workshop, evaluation of: phase I [Randel, McDermott, Ovassapian], A883
monthly reading assignments and quizzes: impact on ABA in-training exam score improvement [Reinhart], A879
novice, task analysis, vigilance, and workload in [Gaba, Herndon, Zornow, Weinger, Dallen], A1060
relative importance of factors used to select residents: national survey [Frankville, Benumof], A876
substance abuse problems in anesthesiology residency training programs [Frasco, Leslie, Jones], A880
Electrocardiography. See under Heart; Monitoring
Electroconvulsive therapy. See under Anesthesia
Electroencephalography. See under Brain
Embolism. See also under Complications
air
in middle cerebral artery, estimation of, using transcranial sonography [Bunegin, Wahl, Albin], A471
quantification of, neural network for [Fine, Orr, Westenskow, Kuck], A465
Endobronchial anesthesia. See under Anesthetic techniques
Endorphins. See under Polypeptides
Endothelin. See under Hormones
Endotracheal tubes. See under Equipment
Enflurane. See under Anesthetics, volatile
Enkephalins. See under Polypeptides

## Enoximone. See under Pharmacology

Enzymes
cholinesterase
human, protein binding of ORG 9426 and inhibitory effect on [Chaudhry, Foldes, Ohta, Nagashima], A786
manganese superoxide dismutase, immunohistochemical localization of, in human lung [Noll, Coursin, Cihla], A281
postoperative CPK levels in healthy pediatric patients [Kerkar, Dhandha, Jewell], A950
serum CK and CK-MB levels in cesarean section patients [Ross, Conrad, Mitruka, Baker], A862
Ephedrine. See under Sympathetic nervous system, pharmacology
Epidural anesthesia. See under Anesthetic techniques
Epinephrine. See under Heart; Pharmacology; Sympathetic nervous system
Equipment

## absorbers

incompetent unidirectional valves in, rebreathing due to [Podraza, Salem, Joseph, Brenchley], A422
airway
pediatric, device selection with body length tape measure in [Hinkle, Arnold], A402
ampules
glass, bacterial contamination of sterile solutions in [Zacher, Evans], A38
anesthesia circuits
continuous breathing flow, measurement of oxygen consumption by indirect calorimetry during [Rasanen], A410
incompetent unidirectional valves in, rebreathing due to [Podraza, Salem, Joseph, Brenchley], A422
inhalation anesthetic delivery during patient transport, safety of [Friedhoff, Abenstein], A893
Mapleson D , visualizing mixing of fresh gas and expired gas in: laboratory model [Halpern, Bissonnette], A421
metal components stop laser fires [Sosis, Braverman, Ivankovich], A396
method to deliver preset inspired concentration of anesthetic regardless of degree of rebreathing [Perhag, Larsson, Luttropp, Persson, Werner], A1010
neural network breathing circuit alarms in anesthesia workstation [Orr, Kuck, Farrell, Westenskow], A1005
noninvasive respiratory monitor, In Vitro and In Vivo evaluation of [Cigada, Sebastianelli, Fordyce, Camporesi], A398
read rebreathing technique may not accurately reflect drug-induced changes in $\mathrm{CO}_{2}$ response curve displacement [Gross, Weller, Conard, Smith], A1094
rebreathing, new, for controlled ventilation [In-nami, Okada, Koshimizu], A133
spontaneous generation of carbon monoxide within [Moon, Ingram, Brunner, Meyer], A873
anesthesia machines
contamination of [Brooks, Gupta, Baker], A874
flush valve of, provision for effective jet ventilation by? [Gaughan, Benumof, Ozaki], A130
prediction of performance in anesthesiology residency training, can personality profile be used in? [McDonald, Gough, Bradley, Lingam, Gupta], A875
cardiac cycle specific thoracic vest inflation during autonomic blockade, coronary occlusion, and cardiac arrest, cardiovascular effects of, in dogs [Peters, Ihle], A1113

## catheters, arterial

venous arterial blood management system, clinical evaluation of [Peruzzi, Blake, Parker, Shapiro, Lichtenthal, Toht Davison], A474
catheters, intravenous
indwelling, in femoral position, thrombotic risk of [Durbec, Albanese, Rouzaud, Granthil], A967
venous arterial blood management system, clinical evaluation of [Peruzzi, Blake, Parker, Shapiro, Lichtenthal, Toht, Davison], A474
venous oxygen saturation and [Auffray, Martin, Prima, Papazian, Gouin], A455
catheters, peridural
contaminated epidural catheter injection site: can it be cleaned for continued use? [Turner, Feldman, Chapin], A834
epidural catheter migration, prospective analysis of, in 1598 surgical cancer patients [deLeon-Casasola, Myers, Rempel, Bacon, Peppriell, Lema], A730
tension applied to lumbar epidural catheters during removal is much greater with patient sitting versus lying [Blackshear, Gravenstein, Radson], A833
catheters, pulmonary arterial
continuous mixed venous oxygen saturation, In Vitrocalibration of, accuracy of, during cardiac surgery [Stensrud, Van Beck, de Castro, Sharp, Abenstein], A464
mixed-venous saturation, does fiberoptic bundle design affect clinical accuracy of? [Durkan, Turner], A412
mixed-venous saturation, new, perioperative evaluation of, in cardiac surgical patients [Pond, Blessios, Lappas, McCawley], A411
noninvasive monitoring of mixed-venous oxygen saturation in infants by near infrared reflectance spectroscopy [Steven, Kurth, Phoon, Nicolson, Chance], A413
pacing leads: In Vivo comparison [Mora, Stemp], A426
pulmonary capillary pressure measured with, in surgical patients [Yamada, Suzukawa, Suzuki, Chinzei, Numata], A427
REF-1, room temperature versusiced injectate in use of [Profeta, Roth, Wiener], A458
venous oxygen saturation and [Auffray, Martin, Prima, Papazian, Gouin], A455
closed circuit anesthesia, sevoflurane in [Bitoh, Ikeda], A343
computers
method to deliver preset inspired concentration of anesthetic regardless of degree of rebreathing [Perhag, Larsson, Luttropp, Persson, Werner], A1010
forced air warmer, thermal balance with, during abdominal surgery [Camus, Delva, Just, Crubille, Lienhart], A491
humidifiers
bacteria killed by [Gilmour, Boyle, Streifel], A498
inhalation therapy
metered dose inhaler, improved delivery efficacy of: further laboratory evaluation of drug release from nozzle extension [Peterfreund, Niven, Brain], A397
lasers
airway surgery, heat-resistant tube safe for [Kaseno, Murakami, Kemmotsu], A889
airway surgery, new ceramic endotracheal tube for, evaluation of [Sosis, Braverman, Ivankovich], A500
airway surgery, new foil-wrapped silicone endotracheal tube designed for, evaluation of [Dillon, Sosis, Heller], A392
$\mathrm{CO}_{2}$, risk of fire from, intraluminal gauge pressure of tracheal tubes and [San Giovanni, Pashayan, Roan, Gater, Gravenstein], A494
$\mathrm{CO}_{2}$ clinical model, tracheal tubes and risk of fire from, intraluminal gauge pressure of [San Giovanni, Pashayan, Gater, Roan, Gravenstein], A399
$\mathrm{CO}_{2}$ surgery, protective effect of helium on silicone endotracheal tube flammability during [Goode, Murray, Murray, Harbaugh], A393
fires, stopped with metal anesthesia circuit components [Sosis, Braverman, Ivankovich], A396

KTP, foil coverings for protecting endotracheal tubes from, evaluation of [Sosis, Braverman, Ivankovich], A501
laser treatment of Port-Wine stains, laryngeal mask as airway during [Garbin, Bogetz, Grekin, Frieden], A953
new resistant foam and silver foil wrapped endotracheal tube, evaluation of [Sosis, Braverman, Ivankovich], A502
magnetic nuclear resonance
transcranial magnetic stimulation, effect of neuroleptanalgesia on motor potentials evoked by, in primates [Ghaly, Stone, Kartha, Asokan, Alexander], A595
masks, anesthesia
comparison of laryngeal mask with endotracheal tube for airway control [Cork, Kaul, Frink, Standen, Depa], A1112
laryngeal mask as airway during laser treatment of Port-Wine stains [Garbin, Bogetz, Grekin, Frieden], A953
position of laryngeal mask airway as determined by magnetic resonance imaging [Denman, Goudsouzian, Cleveland, Shorten], A1045
musical alarm tones, recognition of, evaluation of physicians' abilities in [Block], A497

## pacemaker

pulmonary artery catheter pacing leads: In Vivo comparison [Mora, Stemp], A426
right ventricular inotropic effect of atrial pacing after coronary artery bypass grafting [Lancon, Pillet, Obadia, Caillard], A90
transesophageal pacing and pharmacologic interventions in cardiac arrhythmias [Abadir, Kirkutis, Puodziukynas, Gintautas], A92
treatment of sinus bradycardia and AV junctional rhythm with transesophageal atrial pacing: hemodynamic effects of pacing [Atlee, Pattison, Mathews], A88
pulse monitors
oximetry, does skin pigmentation affect accuracy of? In Vitro study [Volgyesi, PEng, Spahr-Schopfer], A406
oximetry failure, digital block for [Grayson, Bourke], A407
telemetric oximetry network, effects of default alarm limit settings on alarm distribution in, in ward setting [Pan, James], A405
tourniquets
lower limb tourniquet, effect of, on body temperature in pediatric patients [Ginsberg, Bloch, Binner], A957
pneumatic, hemodynamic effects of, in patients with and without cardiovascular disease [Fahmy, Patel, Sunder], A905
transducers
fast flush technique does measure dynamic frequency response of entire monitoring system [Kleinman, Powell, Kumar, Gardner], A452
tubes, endotracheal
ceramic, new, for laser airway surgery, evaluation of [Sosis, Braverman, Ivankovich], A500
comparison of laryngeal mask with, for airway control [Cork, Kaul, Frink, Standen, Depa], A1112
cuff, to reduce intracuff pressure [Guyton, Banner], A401
cuffed, for pediatric cardiac surgery, cause low incidence of postoperative airway problems [Malmros, Fletcher, Jonmaker, Nordstrom], A931
foil-wrapped silicone, new, designed for laser airway surgery, evaluation of [Dillon, Sosis, Heller], A392
heat-resistant, safe for laser airway surgery [Kaseno, Murakami, Kemmotsu], A889
intraluminal gauge pressure of, risk of fire from $\mathrm{CO}_{2}$ lasers and [San Giovanni, Pashayan, Roan, Gater, Gravenstein], A494
intraluminal gauge pressure of, risk of fire from $\mathrm{CO}_{2}$ lasersclinical model and [San Giovanni, Pashayan, Gater, Roan, Gravenstein], A399
new resistant foam and silver foil wrapped, evaluation of [Sosis, Braverman, Ivankovich], A502
protection from KTP laser, foil coverings for, evaluation of [Sosis, Braverman, Ivankovich], A501
silicone, protective effect of helium on flammability of, during $\mathrm{CO}_{2}$ laser surgery, [Goode, Murray, Murray, Harbaugh], A393
special, prevention of cautery-induced fires with [Sosis, Braverman, Ivankovich], A395
wire-reinforced,: composition affects response to external compression and kinking [Wissler, Gravenstein, Banner], A394
valves
flush, of anesthesia machines, provision for effective jet ventilation by? [Gaughan, Benumof, Ozaki], A130
vaporizers
anesthetic agent, accuracy of, improved by implementing selfperformed calibration checks and selective recalibration [Nielsen, Pedersen, Knudsen, Jensen, Ibsen], A417
calibrated enflurane, output of mixtures of isoflurane and halothane from, determination of [Sosis, Braverman, Ivankovich], A499
contamination, preliminary results on incidence of, in selected U.S. hospitals [Popic, Jameson, Arndt], A901
contemporary, consequences of misfilling with desflurane [Andrews, Johnston, Kramer], A887
inhalation anesthetic delivery during patient transport, safety of [Friedhoff, Abenstein], A893
loss of pressurization, desflurane overdose from [Johnston, Kramer, Arens], A416
what really happens when wrong agent is poured into? [Shulte, Block], A420
ventilators
evaluation of, within MRI environment [Klein, Blanch], A403
Erythrocytes. See under Blood
Erythromycin. See under Antibiotics
Esmolol. See under Antagonists; Sympathetic nervous system, betaadrenergic antagonists
Esophagus. See under Gastrointestinal tract
Etomidate. See under Anesthetics, intravenous
Evoked potentials. See under Brain
Eye
injury to, associated with anesthesia: closed claims analysis [Gild, Posner, Caplan, Cheney], A864
intraocular pressure
effect of succinylcholine on, in human eye with extraocular muscles detached [Kelly, Dinner, Turner, Abramson, Haik, Daines], A804
reduction of intubation responses, anesthetic requirements and, by dexmedetomidine, in ophthalmic surgery [AliMelkkila, Jaakola, Kanto, Scheinin, Kallio], A309
monitoring orbicularis oculi is accurate indicator of vocal cords relaxation in atracurium-induced neuromuscular blockade [Ungureanu, Meistelman, Frossard, Donati], A797
pupil
pupillary area fluctuations, continuous measurement of, as marker of autonomic nervous system function [Kimura, Komatsu, Shimada], Al003
retinal blood flow, effects of halothane on, in cats [Roth], A377

## F

Famotidine. See under Histamine
Fenoldopam. See under Pharmacology; Sympathetic nervous system, pharmacology
Fentanyl. See under Analgesics; Anesthetics, intravenous
Filtration, glomerular. See under Kidney
Fluid balance
$5 \%$ hypertonic saline allows rapid fluid loading before lumbar epidural anesthesia [Ph Veroli, Mazoit, Benhamou], A715
brain water, ICP and brain relaxation: comparison of mannitol and furosemide [Schubert, Awad, Perez-Trepichio, Ebrahim, Bloomfield], A202
effect of fluid loading on right ventricular function and hemodynamic state with aortic unclamping during abdominal surgery [Nakatsuka, Posner, Thomas], A105
high quantity glucose and fluid administration, neurological status and brain edema unaffected by, following closed cranial injury in rats [Shapira, Artru, Cotev, MuggiaSulam, Freund], A204
hypertonic saline dextran resuscitation of intraoperative hypovolemia, less net volume loading with [Anaya, Drace, Myers, Kramer], A1122
perioperative fluid shifts, influence of continuous epidural bupivacaine on [Burgess, Brooks, Wade, Perkins, Rodkey], A761
volume loading, effect of, on ischemic heart [Coetzee, Fourie], A.518

## G

G187084B. See under Analgesics; Pharmacology
Gallamine. See under Neuromuscular relaxants
Ganglionic blockade. See under Sympathetic nervous system
Gas tension. See under Measurement techniques
Gases, nonanesthetic
carbon monoxide
spontaneous generation of, within anesthetic circuits [Moon, Ingram, Brunner, Meyer], A873
helium
protective effect of, on silicone endotracheal tube flammability during $\mathrm{CO}_{2}$ laser surgery, [Goode, Murray, Murray, Harbaugh], A393

## Gastrointestinal tract

## esophagus

absence of heart rate variability in esophagectomied patients: probability of autonomic denervation of heart [Kimura, Komatsu, Takezawa, Shimada], A89
intestine
bowel function following major colon surgery, epidural narcotics do not delay return of [Hart, Faul, Buhrman], A669
celiac ganglion stimulation, mesenteric venoconstriction in response to, role of $\alpha$-adrenoceptor subtype during [Tominaga, Stekiel, Bosnjak, Kampine], A570
"mesenteric traction syndrome" aspects of pathophysiology and treatment [Brinkman, Wolf, Walther, Ottinger, Seeling], A161
pulmonary shunt increased by abdominal mesenteric traction [Seltzer, Ritter, Starsnic, Torjman, Marr, Schieren], A118
necrotizing pancreatitis complicated by adult respiratory distress syndrome, release of cytokines in plasma and lymph during [Montravers, Chollet-Martin, Pasquier, Gauzit, Marmuse, Fichelle, Gougerot-Pocidalo, Desmonts], A265
stomach
effects of preoperative erythromycin prophylaxis for ambulatory laparoscopy [Narchi, Elhaddoury, Locatelli, Benhamou], A22
evaluation of gastric emptying in severe burn patients [Ho, Wang, $\mathrm{Ho}, \mathrm{Hu}, \mathrm{Lin}$ ], A293

## Genetic factors

altered neuropeptide expression in rat model of neuropathic pain [Marchand, Wurm, Kato, Kream], A592
calcitonin gene-related peptide release from trachea induced by electrical field stimulation, capsaicin, and potassium, in rat [Hua, Yaksh], A632
cloning gene controlling sensitivity to volatile anesthetics in Caenorhabditis elegans [Sedensky, Morgan, Hudson], A648
DNA mutations responsible for serum butyrylcholinesterase variants, identification of, permits better differentiation of aberrant drug responses [La Du, Primo-Parmo, van der Spek], A372
isolation of mutations that alter sensitivities to several anesthetics in Caenorhabditis elegans [Morgan, Sedensky, Thomas, Kiss], A649
mutants of Saccharomyces cerevisiae resistant to isoflurane [Peterson, Keil], A644
patients homozygous for atypical plasma cholinesterase gene, duration of action of mivacurium-induced neuromuscular block in [Ostergaard, Jensen, Jensen, Viby Mogensen], A774
sickle cell anemia, preoperative transfusion study in: preliminary report [Haberkern, Vichinsky], A871

## Glomerular filtration. See under Kidney

## Glucocorticoids. See under Hormones

Glucose. See under Metabolism
Glycopyrrolate. See under Parasympathetic nervous system
Guanfacine. See under Sympathetic nervous system, alpha-adrenergic agonists

## H

Halothane. See under Anesthetics, volatile
Headache. See under Complications
Heart
arrhythmia
defibrillation threshold, effect of halothane on [Guo, Jones, Gelineau; Solomon, Hanter], A574
malignant, early reappearance of, in postoperative period [Metzler, Mahla, Rotman, Bombotz, Rehak, List], A86
smokers more prone to, during rapid sequence [Martin, Stevens], A91
transesophageal pacing and pharmacologic interventions in. [Abadir, Kirkutis, Puodziukynas, Gintautas], A92
treatment of sinus bradycardia and AV junctional rhythm with transesophageal atrial pacing: hemodynamic effects of pacing [Atlee, Pattison, Mathews], A88
beta-adrenoceptor density in different human heart diseases and
relationship to degree of heart failure [Steinfath, Lavicky, Schmitz, Scholz], A163
blood flow, myocardial
augmented by nitroglycerin, but myocardial depression not reversed, during intracoronary cocaine administration [Buffington], A509
compromised, critical level of hemodilution in: study on regional function and retransfusion [Spahn, Smith, Menius, McRae, Veronee, Leone], A517
coronary small artery constriction and simultaneous arteriolar dilation during hypercapnia [Habazett, Conzen, Vollmar, Adili, Muller, Peter], A526
coronary vasodilation by contrast media: ionic versus non-ionic [Eckel, Kim, Ismail, Salem, Crystall, A525
differential effects of isoflurane and desflurane in isolated guinea pig hearts [Boban, Buljubasic, Stowe, Kampine, Bosnjak], A506
distribution, effects of sevoflurane and isoflurane on, in rats [Habazettl, Conzen, Vollmar, Peter, Messmer], A549
effects of halothane and isoflurane on, in chronically instrumented dogs [Wouters, van Aken, Schreinemakers, Flamengl, A504
effects of hyperosmotic saline solutions in [Eckel, Kim, Ismail, Salem, Crystal], A292
endo/epicardial flow ratio with sevoflurane compared to other volatile agents [Cork, DiNardo, Hilwig, Kern], A505
during halothane and isoflurane anesthesia, comparison of, in chronically instrumented dogs [Khalil, Jones, Foex], A503
halothane vasodilation in coronary vascular smooth muscle, role of potassium channels on [Larach, Schuler, Rhone], A527
hemodynamic and sedative effects of medetomidine and UK14304, in chronically instrumented Yucatan mini swine [Bloor, Kim, Vainio], A577
platelet interaction with, effect of halothane on [Gobeil, Blaise, Tanguay], A519
prevention of hepatic ischemic injury-induced coronary vasoconstriction with mannitol or lazaroid [Pretto, Dorko], A221
proximal and distal coronary arteries, differential response of, to intravenous anesthetics [Coughlan, Flynn, Bosnjak, Kampine, Warltier], A535
regional, during cardiac surgery: measurement using Xe133 clearance with miniature epicardial detectors [Butterworth, Stump, Royster, Prielipp, Kon], A97
regional assessment: left ventricular dysfunction due to isoflurane associated with verapamil [Arvieux, Fagret, Fargnoli, Nivet, Stieglitz, Comet], A507

## cardiac massage

cardiac cycle specific thoracic vest inflation during autonomic blockade, coronary occlusion, and cardiac arrest, cardiovascular effects of, in dogs [Peters, Ihle], A1113

## congenital defects

heart disease, anesthetic morbidity in patients undergoing noncardiac surgery [Strafford, Henderson], A1056
contractility
described by relationship between systolic pressure and stroke volume [Reitan, Moore, Kien, White], All14
coronary occlusion
effect of, on cardiac compensation during hemodilution [Crystal, Levy, Eckel, Kim, Chavez], A516
effects of anesthetic agent, hypotension and, on renal and liver blood flow [Cork, DiNardo, Hilwig, Kern], A289
perioperative myocardial ischemia in relation to anatomic characteristics of coronary arterial stenosis [Hogue, Herbst, Pond, Bowlin, Lappas], A96
direct assessment of myocardial retrograde cardioplegia distribution during cardiac surgery [Aronson, Lee, Walker, Wiencek, Feinstein, Bilotta, Karp, Roizen], A68
echocardiography
2-D transesophageal, thermodilution versus: right ventricular ejection fraction measurement [Koorn, Reich, Tamman, Narang, Hillel], A386
analysis of ventricular dynamics: reperfusion syndrome during orthotopic liver transplantation [Gabriel, Muller, Tuchy, Hackl, Zimpfer], A992
biplane transesophageal, comparison of mitral valve regurgitant jet areas by [Carter, Davis], A389
changes during cesarean delivery under regional anesthesia, assessment of [Utterback, James, Chen, Geiser], A1080
differential ventricular cardioplegia preservation thresholds quantified by thermodilution and echocardiographic systolic performance indices [Rafferty, Durkin, Harris, Elefteriades, Hines, O'Connor], A143
effect of electroconvulsive therapy on [Messina, Paranicas, Katz, Markowitz, Yao, Devereaux], A440
evaluation of effects of preoperative normovolemic hemodilution by TEE in coronary artery disease [Catoire, Saada, Gormezano, Pichaud, Bonnet], A106
measures of ischemia, effects of desflurane on hemodynamics and, [Helman, Bellows, Leung, Velasco, Mangano, SPI Research Group], A152
pediatric transesophageal,: evaluation of feasibility and utility in 129 examinations [Sorensen, Stevenson], A391
severity of mitral regurgitation by TEE, potential intraoperative underestimation of [Konstadt, Louoie, Black, Rao, Scanion], A111
transesophageal, assessment of microembolization during cardiopulmonary bypass by [Calalang, Shapiro, Schwartz, Queeno, Shah, Hick, Meltzer], A64
transesophageal, automated real-time analysis of [Cahalan; Ionescu, Melton], A385
transesophageal, during orthotopic liver transplantation [Roberts, Duke, Gottlich, Ramsay], A388
trànsesophageal, gastroesophageal injury and [Hulyalkar, Ayd, Casella], A387
transesophageal, pulmonary artery pressures estimated by? [Muhiudeen, Oken, Kuecherer, Schiller, Cahalan], A384 electrocardiography
changes during cesarean delivery under regional anesthesia, assessment of [Utterback, James, Chen, Geiser], A1080
correlation between changes in, and intracranial blood following subarachnoid hemorrhage [Arya, Mannien, Gelb, Pelz], Al76
effect of electroconvulsive therapy on [Messina, Paranicas, Katz, Markowitz, Yao, Devereaux], A440
metabolic and ECG changes associated with reperfusion during liver transplantation [Gabrielson, Nam, Reich], A990
persistentST changes on, identification of ischemia in presence of [Jain, Rao, Krishnamurthy, Krishnamachari, Wallis], A442
prognostic significance of ST segment elevation in CABG surgery [Leung, Hollenberg, Mangano], A84
ST-segment changes during cesarean section [Zakowski, Goldstein, Ramanathan, Turndorf], A1079

## epinephrine

effects of, on conduction velocity in Purkinje fibers in dogs [Vodanovic, Turner, Marijic, Kampine, Bosnjak], A569
interaction of halothane and, on caffeine-induced calcium transients from single ventricular myocytes [Knight, Wilde, Haney], A364
potential risks of high doses of, during CPR after short term cardiac arrest in porcine CPR model [Hornchen, Schuttler, Berg], Al116
randomized blinded trial of amrinone and, and amrinone/epinephrine after cardiopulmonary bypass [Royster, Butterworth, Prielipp, Robertie, Kon], A148
inotropism
assessment of negative inotropic effect of human albumin [Journois, Safran, Dru], A164
atrial pacing after coronary artery bypass grafting and [Lancon, Pillet, Obadia, Caillard], A90
chronically infarcted rat hearts demonstrates enhanced halothane myocardial depression in rats [Skeehan, Musch, Riley], A524
cocaine depresses myocardial contractility and produces diastolic dysfunction in conscious dogs [Pagel, Power, Warltier], A508
direct cardiac effects of propofol in situ canine hearts [Ismail, Kim, Salem, Crystal], A510
direct depression of myocardial function by halothane in isolated, perfused infant rabbit heart [Palmisano, Kampine, Stowe, Bosnjak], A926
direct effects of phentolamine and nitroprusside in isolated rabbit myocardium [Lee, Virtusio], A213
effect of alfentanil, fentanyl, and sufentanil [Martin, Lin, Lee, Lee], A514
effect of midazolam on cardiac pump performance and contractility [Messina, Paranicas, Yao, Devereaux], A154
hydralazine versustrimethaphan on isolated rabbit myocardium [Lee, Virtusio, Liu], A138
iontophoretic study of speed of action of various muscle relaxants [Law Min, Bekavac, Glavinovic, Donati, Bevan], A810
of magnesium [Lin, Matin, Lee, Lee], A374
myocardial contractility, effect of thiopental versus propofol on [Aasen, Rooney, Hirsch, Mathru, Kross, Rao], A511
myocardial depressent effect of plasma from liver transplanted patients with post reperfusion syndrome: In Vitro study [Jayais, Chemla, Ecoffey, Descorps-Declere, Samii, Lecarpentier], A554
myocardial performance of blood-perfused isolated rabbit heart preparation, effects of equipotent concentrations of propofol and thiopental on [Mouren, Albo, Plaud, Szekely, Hendrix, Vertomen, Hebrard, Baron, Viars], A512
negative effect of thiopental greater than propofol at equipotent concentrations [Cork, Azari, Kramer, Behr, Kaul], A317
negative effects of propofol and midazolam not potentiated by alfentanil, in perfused isolated rat hearts [Rouge, Ouhayoun, Gantet, Ewquerre, Cathala], A513
randomized blinded trial of amrinone, epinephrine, and amrinone/epinephrine after cardiopulmonary bypass [Royster, Butterworth, Prielipp, Robertie, Kon], A148
ischemia
assessment of cardiac risk before abdominal aortic surgery: unreliability of both dipyridamole thallium scintigraphy and gated radionuclide angiography [Baron, Mundler, Bertrand, Vicaut, Coriat, Kieffer, Viars], A100
desflurane anesthesia and: comparative risk versus sufentanil anesthesia in patients undergoing coronary artery bypass graft surgery [Helman, Leung, Bellows, Pineda, Mangano, SPI Research Group], A1124
echocardiographic measures of, effects of desflurane on hemodynamics and [Helman, Bellows, Leung, Velasco, Mangano, SPI Research Group], A152
effect of volume loading on [Coetzee, Fourie], A518
evidence for, during anesthesia, pulse oximetry uncovers hypoxemia and decreases incidence of: prospective study of 20,802 patients [Moller, Ravlo, Jensen, Rasmussen, Dyrlund, Espersen, Pedersen, Rasmussen, Johannessen, Chraemmer-Jorgensen, Djernes, Wiberg-Jorgensen, Cooper, Gravenstein, Johansen], A1057
global, dichloroacetate enhances myocardial recovery following [Wahr, Childs, Olsanski, Bolling], A521
identification of, in presence of persistent ST changes on ECG [Jain, Rao, Krishnamurthy, Krishnamachari, Wallis], A442
induced by intracoronary injection of endothelin, effects of thoracic epidural anesthesia on metabolism of, in dogs [Fujita, Tsuchida, Kawamata, Kobayashi, Namiki], A515
low postoperative hematocrit associated with, in high-risk patients [Christopherson, Frank, Norris, Rock, Gottlieb, Beattie], A.99
normothermic, effect of nucleoside transport inhibitor on [Boutros, Flameng, van Aken], A522
not prevented by clonidine, during noncardiac surgery [Lipazyc, Engelman], A93
perioperative myocardial, in carotid endarterectomy [Landesberg, Eidelman, Erel, Anner, Assaf, Halimi, Luira, Gotsman, Berlatzky, Cotev], A94
perioperative myocardial, in relation to anatomic characteristics of coronary arterial stenosis [Hogue, Herbst, Pond, Bowlin, Lappas], A96
postoperative, and infarction in noncardiac surgery patients, circadian variation of [Fleisher, Hawes, Rosenbaum], Al02
postoperative T-wave abnormalities in recovery room, incidence and outcome of patients with: retrospective analysis [Chhangani, Nedumogottil, Kartha], A1014
prebypass myocardial, increased risk of, in CABG patients when treated with angiotensin-converting enzyme inhibitors [Schlumberger, Ceddaha, Raffin, Dubois, Fischler], A98
protection against, use of myocardial tissue impedance to determine esmolol's effectiveness in [Howie, Romaneli, Hiestand, Liu, Rezaei, McSweeney], A443
reperfusion and, in newborn heart: effect of glucose [McGowan, Downing], A1046
total, effect of allopurinol on myocardial purine release after reperfusion and, in isolated rat heart [Kawabata, Benson, Goto, Nakazawa, Arakawa], A621
use of putative excitation contraction uncoupler to improve function of isolated hearts after 22 hours of cold hypoperfusion [Stowe, Boban, Bosnjak, Goldberg, Kampine], A.523
metabolism
differential effects of isoflurane and desflurane in isolated guinea pig hearts [Boban, Buljubasic, Stowe, Kampine, Bosnjak], A506
effect of allopurinol on myocardial purine release after total ischemia and reperfusion, in isolated rat heart [Kawabata, Benson, Goto, Nakazawa, Arakawa], A621
effects of halothane on calcium and potassium currents in isolated smooth muscle cells of dog coronary arteries [Buljubasic, Rusch, Marijic, Kampine, Bosnjak], A370
effects of halothane on single potassium channels in isolated smooth muscle cells of dog coronary arteries [Buljubasic, Marijic, Kampine, Bosnjak], A369
of ischemic myocardium induced by intracoronary injection of endothelin, effects of thoracic epidural anesthesia on; in dogs [Fujita, Tsuchida, Kawamata, Kobayashi, Namiki], A515
myocytes, electrically-stimulated, volatile anesthetics affect time course and amplitude of $\mathrm{CA}^{2+}$ transients in [Wilde, Davidson, Knight], A366
myocytes, $\mathrm{SR} \mathrm{CA}{ }^{2+}$ release by caffeine in, volatile anesthetics affect time course and amplitude of [Wilde, Davidson, Knight], A365
$\mathrm{Na} / \mathrm{Ca}$ exchange in heart cells, inhibition of, by enflurane, isoflurane and halothane [Haworth, Goknur], A576
nucleoside transport inhibitor, effect of, on normothermic ischemic heart [Boutros, Flameng, van Aken], A522
single ventricular myocytes, caffeine-induced calcium transients from, interaction of epinephrine and halothane on [Knight, Wilde, Haney], A364
use of putative excitation contraction uncoupler to improve function of isolated hearts after 22 hours of cold hypoperfusion [Stowe, Boban, Bosnjak, Goldberg, Kampine], A523
mitral valve
mitral valve replacement, inhaled nitric oxide in pulmonary hypertension following [Girard, Lehot, Clerc, Ffrench, Estanove], A984
regurgitant jet areas, comparison of, by biplane transesophageal echocardiography [Carter, Davis], A389
regurgitation, V-waves insensitive monitors of, because of nonuniformity of left atrial blood flow [Weiss, Savino], A147
replacement, influence of moderate hypocapnia on pulmonary vascular tone following [Mahdi, Salem, Joseph, Paulissian, Hernandez], A166
severity of mitral regurgitation by TEE, potential intraoperative underestimation of [Konstadt, Louoie, Black, Rao, Scanion], A111
myocardial function
congestive heart failure, pharmacokinetics of fentanyl in [Norgaard, Pineda, McGlinch, Zimmerman, Estrin], A325
effects of triiodothyronine on hemodynamic status and, in brain dead donors [Cohen, Goarin, Jacquens, Aurengo, Clergue, Viars], A1018

## myocardial infarction

chronic, demonstrates enhanced halothane myocardial depression, in rats [Skeehan, Musch, Riley], A524
extent of, reperfusion-induced diastolic dysfunction correlates with [Johnston, Vinten-Johansen, Toombs, Anderson, Tommasi], A573
nitroglycerin
coronary flow augmented by, but myocardial depression not reversed, during intracoronary cocaine administration [Buffington], A509
pulse rate
absence of heart rate variability in esophagectomied patients: probability of autonomic denervation of heart [Kimura, Komatsu, Takezawa, Shimada], A89
hemodynamic instability, are there any rules used for definition off: medical decision making [East, Henderson, Pace, Morris, Brunner], A1059
variability, changes in, phenylephrine-induced bradycardia does not correlate with [Jaffe, Fung, Behrman], A444
Purkinje fibers
conduction velocity in, effects of epinephrine and volatile anesthetics on, in dogs [Vodanovic, Turner, Marijic, Kampine, Bosnjak], A569
transient outward potassium current in, effects of volatile anesthetics on [Supan, Buljubasic, Marijic, Eskinder, Kampine, Bosnjak], A368
resuscitation
cardiac cycle specific thoracic vest inflation during autonomic blockade, coronary occlusion, and cardiac arrest, cardiovascular effects of, in dogs [Peters, Ihle], A1113
DNR orders in operating room: survey of anesthesiologists' opinions and concerns [Boyd, Boudreaux], A900
DNR orders: should they apply in operating room? [Tenedios, Indeck, Turkewitz, Poler], A280
do not resuscitate orders and anesthesiologist, survey on [Clemency], A888
do not resuscitate orders in presurgical patient: study of U.S. Anesthesiology Department Policies [Rothenberg, Franklin, Ivankovich, McCarthy], A907
improved with sodium bicarbonate, after ten minutes of cardiac arrest in dogs [Bircher], A246
out-of-hospital, pharmacokinetics and comparative efficacy of epinephrine during [Schuttler, Hornchen, Bremer], A287
potential risks of high doses of epinephrine during, after short term cardiac arrest in porcine CPR model [Hornchen, Schutder, Berg], A1116
tamponade
atrio-ventricular interdependence with [Beloucif, Takata, Shimada, Robotham], A1022
magnesium sulfate on reflex sympathetic vasoconstriction and hypotension during acute hemorrhage and [Liao, Belani] [Liao, Belani], A821
transplantation
perioperative changes in IL-6 with [Sakai, Latson, Whitten, Elmore, Krishnan, Ring, Lipton, Giesecke], A107
right ventricular function after [Bizouarn, Soulard, Treilhaud, Blanloeil, Train], A223
ventricles
differential ventricular cardioplegia preservation thresholds quantified by thermodilution and echocardiographic systolic performance indices [Rafferty, Durkin, Harris, Elefteriades, Hines, O'Connor], A143
echocardiographic analysis of ventricular dynamics: reperfusion syndrome during orthotopic liver transplantation [Gabriel, Muller, Tuchy, Hackl, Zimpfer], A992
effect of fluid loading on right ventricular function and hemodynamic state with aortic unclamping during abdominal surgery [Nakatsuka, Posner, Thomas], A105
effects of urapidil and clonidine on left ventricular performance [Lepage, Pinaud, Malinovsky, Cozian, Souiron], A137
left ventricular dysfunction due to isoflurane associated with verapamil: regional myocardial blood flow assessment [Arvieux, Fagret, Fargnoli, Nivet, Stieglitz, Comet], A507
left ventricular systolic and diastolic function during treatment of post CABG hypertension [Davies, Karski, Teasdale, Ivanov, Young, Weisel], A145
relationship between systolic pressure and stroke volume describes myocardial contractility [Reitan, Moore, Kien, White], All14
right, function of, after orthotopic heart transplantation [Bizouarn, Soulard, Treilhaud, Blanloeil, Train], A223
right, function of, antegrade versus retrograde cardioplegia influence on [Amory, Wanger, Weinstein], A150
right ventricular ejection fraction measurement: thermodilution versus 2-D transesophageal echocardiography [Koorn, Reich, Tamman, Narang, Hillel], A386
right ventricular infarction, extent of, reperfusion-induced diastolic dysfunction correlates with [Johnston, VintenJohansen, Toombs, Anderson, Tommasi], A573
verapamil
isoflurane associated with, left ventricular dysfunction due to: regional myocardial blood flow assessment [Arvieux, Fagret, Fargnoli, Nivet, Stieglitz, Comet], A507
Heating. See under Temperature
Helium. See under Gases, nonanesthetic
Hematoma. See under Complications
Hemodilution. See under Blood
Hemodynamics. See under Measurement techniques

## Hemorrhage

acute, magnesium sulfate on reflex sympathetic vasoconstriction and hypotension during pericardial tamponade and [Liao, Belani], A821
epidural anesthesia worsens hypotension and uterine blood flow during, in gravid ewes [Vincent, Chestnut, Sipes, Thompson, Debruyn, Bleuer, Chatterjee], A823
graded, effect of, on liver oxygenation and ethanol clearance [Lund, Iannoli, Papadakos, Pearce], A216
hemorrhagic hypotension, does calcium chloride increase blood pressure and uterine blood flow during, in hypermagnesemic gravid ewes? [Vincent, Chestnut, Sipes, Thompson, Bleuer, Debruyn, Chatterjee], A822
shock, veno-arterial gradients for $\mathrm{PCO}_{2}$ and $p \mathrm{H}$ reflect tissue hypoxia during, in dogs [Vanderlinden, Gilbart, Paques, Bakker, Vincent], A236
Heparin. See under Blood
High frequency ventilation. See under Ventilation
Hippocampus. See under Brain
Histamine. See also under Pharmacology
airway constriction following atracurium is due to histamine release [Mehr, Lindeman, Hirshman], A974
famotidine
oral, for aspiration prophylaxis in surgical outpatients [Solanki, Talke], A908
plasma, highly elevated during cardiac surgery [Alston], A60

## ranitidine

water and, increase gastric $p \mathrm{H}$ and decrease gastric residual volume in outpatients [Ross, Momany], A1110

## Hormones

adrenal
adrenal chromaffin cells, suppression of $\mathrm{CA}^{2+}$ dependent $\mathrm{K}^{+}$ conductance in, by halothane [Pancrazio, Lynch], A1038
subarachnoid adrenal medullary transplantation [Winnie, Krolick, Sagen, Pappas, Wang], A695

## adrenocorticotropic

ACTH and $\beta$-endorphin, post-translational processing of, in human pituitary [Bernard, Chronwall, Millington], A700
do small children have limited adrenocortical response to, during abdominal surgery? [Wolf, Eyres, Laussen], A948
pituitary-adrenal axis, epidural triamcinolone causes prolonged and severe suppression of [Kay, Raff, Findling], A694
antidiuretic
effects of vasopressin on regional blood volume in supine humans [Hopf, Klement, Stuhmeier, Wust, Reters], A160
vasopressin dilates cerebral arteries in fetal sheep [Tong, Eisenach], A819
corticosteroid
do small children have limited adrenocortical response to ACTH during abdominal surgery? [Wolf, Eyres, Laussen], A948
is urinary cortisol excretion measurement during surgery useful gauge of stress response? [Yorozu, Shigematsu, Miyazawa, Hiyama, Doi], A212
pituitary-adrenal axis, epidural triamcinolone causes prolonged and severe suppression of [Kay, Raff, Findling], A694
endothelin
levels of, in patients requiring blood pressure reduction following cardiopulmonary bypass [Lawhorn, Nelson, Lonergan, Hudson], A50
estrogen withdrawal increases cerebral vasoreactivity [Shay, Futo, Block, Badrov, Thisted, Moss], A540

## glucocorticoids

high-dose regimen of triamcinolone induces resistance to vecuronium neuromuscular block in cats [Baker], A790
mechanism of, in peripheral airways [Lindeman, Hirshman], A975

## messenger

endothelin levels in patients requiring blood pressure reduction following cardiopulmonary bypass [Lawhorn, Nelson, Lonergan, Hudson], A50
progesterone-mediated potentiation of spinal opiates [Carp, Jayaram], A838
prostaglandins
alteration of reactivity to, by halothane and isoflurane, in human cerebral arteries [Reinstrup, Uski, Messeter], A200
changes in systemic and renal plasma prostanoid concentrations associated with alterations in renal function during hyperdynamic sepsis in sheep [Morel, Weber], A244
effect of thromboxane receptor blockade following inhalation injury in sheep [Locik, Traber, Theissen, Flynn, Traber], A224
effects of, on hepatic blood flow and oxygen balance during anesthesia of liver surgery [Kainuma, Nakashima, Sakuma, Kimura, Shimada], A141
eicosanoid production, edema formation and: halothaneoxidant interactions in Ex Vivo perfused rabbit lung [Shayevitz, Johnson, Knight], A339
eicosanoids, regional recovery of, after forebrain ischemia, by microdialysis, in rats [Patel, Drummond, Mitchell, Yaksh, Cole], A628
indomethacin reduces carbon dioxide-induced elevation of intracranial pressure in patients with cerebral disorders [Taeishi, Sadamitsu, Soejima, Maekawa, Sanuki, Matsumoto, Nakashima], A188
modulation by $\mathrm{CO}_{2}$ and $p \mathrm{H}$ of reactivity to PGF2a in human cerebral arteries [Reinstrup, Uski, Messeter], A199
right ventricular function after orthotopic heart transplantation [Bizouarn, Soulard, Treilhaud, Blanloeil, Train], A223
substance $P$ levels are decreased in pregnancy [Mouton, Kambam, Naukum, Blanks, Rama Sastry], A842
thyroid
hyperparathyroidism, succinylcholine dose-response in [Roland, Villiers, Lequeau, Roupie, Sarfate, Eurin], A808
triiodothyronine, effects of, on hemodynamic status and myocardial function in brain dead donors [Cohen, Goarin, Jacquens, Aurengo, Clergue, Viars], A1018
Humidifiers. See under Equipment
Hydralazine. See under Pharmacology
Hydromorphone. See under Analgesics
Hypercarbia. See under Carbon dioxide
Hyperglycemia. See under Metabolism
Hypertension. See under Blood pressure; Complications
Hyperthermia
malignant
children labeled as "malignant hyperthermia susceptible," perioperative course of [Yentis, Hartley], A870
evidence of heterogeneity in pathogenesis of,: excessive acylation of triglycerides in muscle from swine exhibiting clinical MH [Fletcher, Erwin, Tripolitis, Yudkowsky, Rosenberg], A298
human and porcine, halothane increases open states of calcium release channel from [Nelson], A301
human skinned muscle fibers, fiber-type specific caffeine sensitivities in [Adnet, Bromberg, Haudecoeur, Krivosic-Horber, Krivosic, Adamantidis, Reyford], A294
humans diagnosed as susceptible to, altered lipid metabolism in primary cultures of skeletal muscle from [Fletcher, Jiang, Gong, Rosenberg], A638
implications for,: fatty acids markedly lower threshold for halothane-induced $\mathrm{Ca}^{2+}$ release from terminal cisternae [Fletcher, Mayerberger, Tripolitis, Yudkowsky, Rosenberg], A297
inositol triphosphate and, in human skeletal muscle [Scholz, Hartung, Troll, Patten, Schulte am Esch], A641
presentations of, in community-MH hotine 1990 [Greenberg, Rosenberg], A869
relative potency of desflurane, halothane, and isoflurane in triggering episodes of, in swine [Gammel, Wedel, Milde, Iaizzo], A296
ryanodine contractures in, diagnostic evaluation of, in human and pig skeletal muscle [Nelson], A302
scorpion venom that activates normal and inhibits susceptible ryanodine receptors [Valdivia, Hayek, Hogan, Coronado], A643
susceptibility to, effects of calcitonin gene-related peptide on skeletal muscle from patients evaluated for [Fleming, Lewis, Willeford], A813
susceptible muscle, calcium agonist bay K8644 potentiates isoflurane/halothane In Vitro contracture reponse of, to same extent [Adnet, Krivosic-Horber, Adamantidis, Reyford, Haudecoeur, Dupuis], A295

## Hypnotics

barbiturates
pentobarbital, inhibits $\mathrm{Ca}^{2+}$-sensitive secretion in basophils [Robinson-White], A994
pentobarbital action on sodium channels, molecular sites of [Wang, Kauff, Wartenberg, Duch, Urban], A363
propofol versus morphine and, in sedation of patients with severe head injury [Pearson, Kruse, Demetrion], A248
benzodiazepines
effect of midazolam on cardiac pump performance and contractility [Messina, Paranicas, Yao, Devereaux], A154
efficacy of additional flumazenil after ambulatory general anesthesia with midazolam [Bizzarri-Schmid, Philip, Manzi, Dedrick, Mallampati, Mushlin], A30
flumazenil improves midazolam impaired cognitive function [Ritter, Hoshizaki, Stead], A37
indirect memory during anesthesia: effect of midazolam [Westmoreland, Sebel, Winograd, Goldman], A192
intranasal midazolam, effect of, on memory in pediatric patients [Twersky, Hartung, McClain, Berger, Beaton], A919
intranasal midazolam, pharmacokinetics and clinical effects of: influence of cimetidine [Servin, Laxenaire, Samain, Farinotti, Desmonts], A352
lorazepam, comparison of droperidol to, as antiemetic in children undergoing strabismus operations on outpatient basis [Khalil, Berry, Howard, Hanis, Mazow], A958
midazolam, depression of swallowing reflex two hours after [Lambert, D'Honneur, Abhay, Gail, Duvaldestin], A891
midazolam, intranasal and intravenous, pharmacokinetics of, in young children [Delaunay, Murat, Rey, Pons, SaintMaurice], A923
midazolam, synergistic interaction between $\alpha 2$ adrenergic agonists and benzodiazepines in rats [Salonen, Reid, Maze], All25
midazolam and diazepam, comparative amnesic effects of: quantitative assessment [Parris, Schwartz, Bean, Johnson, Fraifeld], A1031
midazolam infusion for conscious sedation following abdominal aortic surgery [Miller, Martineau, Dean, Vallee, LeBel], A271
oral midazolam premedication, safety of, for use in children [Spahr-Schopfer, McMillan, Sikich, Hartley, Lerman], A921
oral midazolam premedication in pediatric day surgery, efficacy and feasibility of [McMillan, Spahr-Schopfer, Sikich, Hartley], A27
propofol bolus versus infusion, comparison with midazolam for monitored sedation [Pratila, Fischer, Alagesan, Alagesan, Reinsel, Pratilas], A20
response of human CNS sodium channels to midazolam [Frenkel, Urban], A646
reversal of midazolam-induced anesthesia by flumazenil during stereotaxic thalamic stimulation [Berberich, Orliaguet, Nguyen, Rostaing, Duvaldestin], A189
transmucosal midazolam for preinduction of anesthesia in pediatric patients: comparison of intranasal and sublingual routes [Karl, Larach, Ruffle], A922
diazepam
comparative amnesic effects of midazolam and: quantitative assessment [Parris, Schwartz, Bean, Johnson, Fraifeld], A1031
lorazepam
comparison of droperidol to, as antiemetic in children undergoing strabismus operations on outpatient basis [Khalil, Berry, Howard, Hanis, Mazow], A958
midazolam
ambulatory general anesthesia with, efficacy of additional flumazenil after [Bizzarri-Schmid, Philip, Manzi, Dedrick, Mallampati, Mushlin], A30
comparative amnesic effects of diazepam and: quantitative assessment [Parris, Schwartz, Bean, Johnson, Fraifeld], A1031
comparison with propofol for monitored sedation [Pratila, Fischer, Alagesan, Alagesan, Reinsel, Pratilas], A20
depression of swallowing reflex two hours after [Lambert, D'Honneur, Abhay, Gail, Duvaldestin], A891
effect of,: indirect memory during anesthesia [Westmoreland, Sebel, Winograd, Goldman], A192
effect of, on cardiac pump performance and contractility [Messina, Paranicas, Yao, Devereaux], A154
flumazenil improves impaired cognitive function [Ritter, Hoshizaki, Stead], A37
infusion of, for conscious sedation following abdominal aortic surgery [Miller, Martineau, Dean, Vallee, LeBel], A271
intranasal, effect of, on memory in pediatric patients [Twersky, . Hartung, McClain, Berger, Beaton], A919
intranasal, pharmacokinetics and clinical effects of: influence of cimetidine [Servin, Laxenaire, Samain, Farinotti, Desmonts], A352
intranasal and intravenous, pharmacokinetics of, in young children [Delaunay, Murat, Rey, Pons, Saint-Maurice], A923
oral premedication, safety of, for use in children [Spahr-Schopfer, McMillan, Sikich, Hartley, Lerman], A921
oral premedication in pediatric day surgery, efficacy and feasibility of [McMillan, Spahr-Schopfer, Sikich, Hartley], A27
reversal of anesthesia induced by, flumazenil during stereotaxic thalamic stimulation and [Berberich, Orliaguet, Nguyen, Rostaing, Duvaldestin], A189
synergistic interaction between $\alpha 2$ adrenergic agonists and benzodiazepines in rats [Salonen, Reid, Maze], A1125
transmucosal, for preinduction of anesthesia in pediatric patients: comparison of intranasal and sublingual routes [Karl, Larach, Ruffle], A922

## pentobarbital

action of, on sodium channels, molecular sites of [Wang, Kauff, Wartenberg, Duch, Urban], A363
inhibits $\mathrm{Ca}^{2+}$-sensitive secretion in basophils [Robinson-White], A994
Hypocarbia. See under Carbon dioxide
Hypoglycemia. See under Metabolism
Hypotensive anesthesia. See under Anesthetic techniques
Hypothermia. See under Anesthetic techniques
Hypoxia. See also under Brain
altered release and metabolism of norepinephrine in superfused canine saphenous veins in presence of [Kamath, Rorie, Tyce], A557
hypoxemia on admission to postanesthetic care unit [Deepika, Makkaoui, Archatz-Deresz, Bikhazi], A899
loss of hypoxic ventilatory response following bilateral modified radical neck dissection [Moorthy, Sullivan, Fallon, Dierdorf, Radpour], A1099
respiratory sensitivity to, after brifentanyl [Cigada, Afifi, Glass, Esposito, Camporesi], A1097
sustained, ventilatory response at four levels of [Temp, Bigoni, Ward], A1098
ventilatory response to, in awake and anesthetized humans [Sjorgren, Ebberyd, Sollevi, Lindahl], A1102

I

## Immune response

effects of impact administration on, in critically ill [Singer, Katz, Bursztein, Pollack, Kvetan, Askanazi], A270
interaction of antibiotics on pipecuronium-induced neuromuscular blockade [de Gouw, Crul, Vandermeersch, Mulier, van Aken], A776
liver cytosolic proteins from halothane-treated mice recognized by antibodies in halothane hepatitis patients' sera [Lindsey, Martin, Pohl], A993
T-cell subsets and antigen-presenting accessory cells, differential effect of isoflurane on, In Vitro [Grun, Maurer, Torjman, Schieren, Maurer], A1000
Induction. See under Anesthetic techniques
Infection
antimicrobial properties, in agents used for epidural analgesia?
[Feldman, Chapin, Turner, Contant], A835
bacteremia
contamination of sterile solutions in glass ampules [Zacher, Evans], A38
bacteria killed by humidifiers [Gilmour, Boyle, Streifel], A498
herpes simplex virus-specific cytotoxic T lymphocyte function, effect of morphine on: possible mechanism involved in HSV recurrent infection following epidural morphine administration [Bonneau, Sheridan, McDonald, Glaser], A.590
maxillary sinusitis, endotracheal intubation-induced; prospective randomized study [Leguillou, Rouby, Xiang, Zouaoui, Nicolas, Ghedira, Gosgnach, Viars], A1020
prediction of performance in anesthesiology residency training, can personality profile be used in? [McDonald, Gough, Bradley, Lingam, Gupta], A875
preliminary results on incidence of vaporizer contamination in selected U.S. hospitals [Popic, Jameson, Arndt], A901

## pulmonary

nosocomial lung infection in ventilated patients, prevention of: selective decontamination versus endotracheal administration of aminoglycoside antibiotic [Bach, Bohrer, Geiss, Martin], A1013
nosocomial pneumonia, endotracheal intubation-induced sinusitis and, in critically ill patients [Leguillou, Rouby, Xiang, Nicolas, Candaut, Viars], A1019
septicemia
cardiorespiratory effects of pentoxifylline in septic and non-septic states [Mayer, Steltzer, Klimscha, Oismuller, Hammerle], A232
cytokine elevation in children with ARDS and [Costarino, Sullivan, Harris, Kilpatrick], A245
dextran 60 or fluid gelatin for fluid expansion in [Auffray, Papazian, Perrin, Saux, Martin], A242
hyperdynamic, alterations in renal function during, changes in systemic and renal plasma prostanoid concentrations associated with, in sheep [Morel, Weber], A244
improvement of oxygen utilization by pentoxifylline in [Steltzer, Mayer, Weinstabl, Oismuller, Hammerle], A231
levels of messenger RNA coding for phosphoenolpyruvate carboxykinase increased in, in rat [Deuschman, Clemens, Buchman], A291
norepinephrine versus epinephrine in septic shock [Francois, Blanloeil, Lejus, Michel, Pinaud], A241
relationship between oxygen delivery and mixed venous oxygen saturation during [Levraut, Jambou, Kaidomar, Grimaud], A234
selective changes induced by, in regional vascular reactivity to norepinephrine and fenoldopam in sheep [Schiffer, Schwieger, Poinsot, Klohn, Mentha, Gaumann, Morel], A243
treated by norepinephrine, hemodynamic effects of dobutamine during [Blanloeil, Lejus, Francois, Michel, Pinaud], A240
In Vivo modulation of human neutrophil function by pentoxifylline in [Oismuller, Mayer, Steltzer, Michsche, Hammerle], A233
staphylococcus aureus, growth of, in four intravenous anesthetics [Sosis, Braverman, Villaflor], A439
Inhalation therapy. See under Equipment
Inotropism. See under Heart
Insufflation. See under Anesthetic techniques
Insulin. See under Metabolism
Intensive care
anemia in, transfusion requirement and role of phlebotomy [Gettinger, Parsonnet, Corwin], A239
bedside blood gas and electrolyte monitoring in [Prielipp, Zaloga, Dudas, Black], A485
cardiopulmonary and metabolic response to chest physical therapy: stressing critically ill patient [Weissman, Kemper], A238
endotracheal intubation-induced sinusitis and nosocomial pneumonia in critically ill patients [Leguillou, Rouby, Xiang, Nicolas, Candaut, Viars], A1019
head injury patients, capnography for monitoring hyperventilation of [Liu, Leighton, Caron, McBride, Bongard], A249 head trauma patients, urapidil increases intracranial pressure in [Germann, Weinstabl, Mayer, Krafft, Hammerle], A247
hypermetabolic and immune effects of impact administration in critically ill [Singer, Katz, Bursztein, Pollack, Kvetan, Askanazi], A270
infusion of vasoconstrictive agents in, comparison of central and peripheral intraarterial blood pressure measurements in [Barr, Mihm, Gaeta], A283
midazolam versus propofol for prolonged sedation in [Geller, Weinbroum, Sorkine, Silbiger, Halpern], A269
postanesthetic care unit, hypoxemia on admission to [Deepika, Makkaoui, Archatz-Deresz, Bikhazi], A899
practice patterns of anesthesia intensivists in use of muscle relaxants, national survey on [Klessig, Geiger, Murray, Cousins], A290
respiratory pattern and function in neonate, effect of branchedchain amino acid supplementation on [Blazer, Reinersman, Askanazi, Hollinger, Kvetan, Katz, Fleischman], A1093
sedation, following CABG: propofol versus midazolam [Higgins, Yared, Estafanous, Coyle, Vassel, Goodale], A278
transcutaneous $\mathrm{CO}_{2}$ monitoring in, at $42^{\circ} \mathrm{C}$ probe temperature shows good correlation with arterial $\mathrm{PCO}_{2}$ [Weir, Wong, Tremper, Zaccari, Daves, Patel], A493
Intercostal nerve block. See under Anesthetic techniques, regional
Intestine. See under Gastrointestinal tract
Intracranial pressure. See under Brain
Intraocular pressure. See under Eye
Intravenous anesthetics. See Anesthetics, intravenous
Intravenous anesthetic techniques. See under Anesthetic techniques
Intravenous catheters. See under Equipment
Intubation, tracheal
complications
endotracheal intubation-induced maxillary sinusitis: prospective randomized study [Leguillou, Rouby, Xiang, Zouaoui, Nicolas, Ghedira, Gosgnach, Viars], A1020
endotracheal intubation-induced sinusitis and nosocomial pneumonia in critically ill patients [Leguillou, Rouby, Xiang, Nicolas, Candaut, Viars], A1019
hemodynamic response to, not attenuated by isoflurane at depths producing burst-suppression EEG pattern [Spackman, Messick, Sharbrough], A355
intubation conditions and time-course of action of ORG 9426 [Vandenbrom, Wierda, Huizinga, Hennis], A788
ORG 9426 used for: comparison with succinylcholine [Dubois, Shearrow, Tran, Kataria, Rever, Gadde, Lea], A1066
after propofol anesthesia without neuromuscular blocker is not practical [Kothary, Pandit, Lebenbom-Mansour, Levy, Randel], A1111
semi-emergent: hemodynamic changes [Mort, Brakoniecki], A1017
technique
blind oral intubation, development and evaluation of approach to [Vacanti, Roberts], A1007
cardiovascular and hormonal stress response to, effects of alfentanil on [Miller, O'Brien, Martineau, Abou-Hamad, Hull, Greenway, Hindmarsh], A82
difficult, radiological prediction of,: posterior $\mathrm{CO}-1$ and C1-2 Gaps [Calder, Calder, Crockard], A190
difficult intubation in newborns and infants using ultra thin fiberoptic bronchoscope [Monrigal, Granry, Le Rolle, Rod, Cavellat], A1044
QT interval during, with propofol or thiopental [Guiraud, Chassard, Gelas, Bouletreau], A83
superior laryngeal nerve block for laryngoscopy and intubation [Taniguchi, Fukunaga, Harano, Totoki, Takasaki], A81

## Ions

calcium
antagonist, adenosine inhibits oxygen free radical production of human polymorphonuclear leukocytes by action as [Thiel, Bardenheuer], A1016
$\beta$-agonists decrease open-state probability of voltage-dependent calcium channels in airway smooth muscle [Tomasic, Boyle, Kotlikoff], A584
$\mathrm{Ca}^{2+}$ exchange in endothelial cells, differential effects of halothane and isoflurane on [Shayevitz, Williams, Varani], A1001
$\mathrm{Ca}^{2+}$ homeostasis in oxidant-injured endothelium, effects of halothane and isoflurane on [Shayevitz, Williams, Varani], A1002
$\mathrm{CA}^{2+}$ transients in electrically-stimulated cardiac myocytes, volatile anesthetics affect time course and amplitude of [Wilde, Davidson, Knight], A366
CaCl 2 pretreatment, in prevention of concentration-dependent tetanic contraction induced by subarachnoid disodium EDTA [Wang, Li, Hiller, Simon, Budzilovich], A651
channel blocker, propofol as, and produces endothelium-independent vasodilation [Chang, Lacy, Davis], A536
currents, in isolated smooth muscle cells of dog coronary arteries, effects of halothane on [Buljubasic, Rusch, Marijic, Kampine, Bosnjak], A370
cytosolic $\mathrm{Ca}^{2+}$, elevated, cell death from chemical anoxia in neuronal cell line not mediated by [Johnson, Uhl, Gores, Sill], A612
cytosolic $\mathrm{Ca}^{2+}$ increase and contraction in vascular smooth muscle of rat aorta, inhibitory effect of halothane and isoflurane on [Tsuchida, Notsuki, Yamakage, Fujita, Namiki], A531
cytosolic ionized concentration of, decreased by halothane during acetylcholine-induced contraction of canine trachealis muscle [Jones, Housmans, Warner, Rehder], A639
does calcium chloride increase blood pressure and uterine blood flow during hemorrhagic hypotension in hypermagnesemic gravid ewes? [Vincent, Chestnut, Sipes, Thompson, Bleuer, Debruyn, Chatterjee], A822
endothelial cell calcium mobilization altered by volatile anesthetics [Loeb, O'Brien, Longnecker], A533
halothane-induced release of, from terminal cisternae, fatty acids markedly lower threshold for,: implications for malignant hyperthermia [Fletcher, Mayerberger, Tripolitis, Yudkowsky, Rosenberg], A297
high-threshold calcium current, cannabinoid inhibition of [Mackie, Hille], A585
levels of, during fresh frozen plasma administration in patients with end-stage liver disease [Washington, Prager, Kelley, White, Cauldwell], A277
pentobarbital inhibits $\mathrm{Ca}^{2+}$-sensitive secretion in basophils [Robinson-White], A994
release channel, halothane increases open states of, from human and porcine malignant hyperthermia [Nelson], A301
role of cytosolic $\mathrm{Ca}^{2+}$, cAMP and protein kinase C in effect of halothane on canine tracheal smooth muscel [Yamakage, Namiki], A354
SR $\mathrm{CA}^{2+}$ release by caffeine in cardiac myocytes, volatile anesthetics affect time course and amplitude of [Wilde, Davidson, Knight], A365
suppression of $\mathrm{CA}^{2+}$ dependent $\mathrm{K}^{+}$conductance in adrenal chromaffin cells by halothane [Pancrazio, Lynch], A1038

## magnesium

antiarrhythmic doses of, does it potentiate vecuronium neuromuscular block? [Butterworth, Frawley, Dudas, Cole], A802
decreases gravid ewe carotid and uterine artery dose response to phenylephrine In Vitro [Bollen, Chestnut, Liu, Weiner], A820
on reflex sympathetic vasoconstriction and hypotension during pericardial tamponade and acute hemorrhage [Liao, Belani], A821
inotropism of [Lin, Matin, Lee, Lee], A374
potassium
ATP-sensitive $\mathrm{K}^{+}$current, activation of [Deutsch, Klitzner, Weiss], A555
channels, role of, on halothane vasodilation in coronary vascular smooth muscle, [Larach, Schuler, Rhone], A527
cloned channels of, using voltage clamp techniques, molecular basis of ketamine action on [Kulkarni, Bayley, Anantharam, Treistman], A383
currents, in isolated smooth muscle cells of dog coronary arteries, effects of halothane on [Buljubasic, Rusch, Marijic, Kampine, Bosnjak], A370
hyperkalemia with blood transfusion in emergent and trauma surgery [Wall, Pavlin], A250
single channels, in isolated smooth muscle cells of dog coronary arteries, effects of halothane on [Buljubasic, Marijic, Kampine, Bosnjak], A369
suppression of $\mathrm{CA}^{2+}$ dependent $\mathrm{K}^{+}$conductance in adrenal chromaffin cells by halothane [Pancrazio, Lynch], A1038
transient outward current of, in Purkinje fibers, effects of volatile anesthetics on [Supan, Buljubasic, Marijic, Eskinder, Kampine, Bosnjak], A368
sodium
channels, molecular sites of pentobarbital action on [Wang, Kauff, Wartenberg, Duch, Urban], A363
channels, single, local anesthetics manifest two distinct modes of blockade of [Gingrich, Beardsley, Yue], A687
hyperosmotic saline solutions, effects of, in coronary circulation [Eckel, Kim, Ismail, Salem, Crystal], A292
levels of, in hippocampal slice, thiopental and tetrodotoxin have similar effects on, in rat [Abramowicz, Kass, Cottrell], A607
rapid increase in, associated with CPM after liver transplantation [Videira, Kang, Martinez, DeWolf, Aggarwal, Gasior], A222
Ischemia. See under Brain; Heart
Isoflurane. See under Anesthetics, volatile
J
Jet ventilation. See under Ventilation
Jugular vein. See under Veins

## K

Ketamine. See under Anesthetics, intravenous
Ketanserine. See under Pharmacology
Ketorolac. See under Analgesics; Pharmacology

## Kidney

blood flow
during controlled hypotension with adenosine or sodium nitroprusside in dogs under halothane anesthesia [Jarnberg, Jamond, Westman, Woods], A552
distribution, effects of sevoflurane and isoflurane on, in rats [Habazettl, Conzen, Vollmar, Peter, Messmer], A549
effects of acute coronary stenosis, anesthetic agent, and hypotension on [Cork, DiNardo, Hilwig, Kern], A289
during orthotopic liver transplantation, comparative evolution of, with and without veno-venous bypass [Veroli, Elhage, Gillon, Descorps-Declere, Jayais, Ecoffey], A219
regional hemodynamic dose-responses to fenoldopam compared to dopamine in sedated sheep [Schwieger, Schiffer, Poinsot, Klohn, Mentha, Guamann, Morel], A563
failure
hemodynamic changes during hemodiafiltration onset [Merle, Fulgencio, Troche, Zazzo], A276
hemofiltration, cytokines in plasma and ultrafiltrate in relation to [Tonnesen, Hansen, Hohndorf, Bendtzen, Diamant], A266
filtration, glomerular
comparison of inulin clearance with transcutaneous detection of [Bauman, Kelly, Scuderi, Lorentz, Watson], A435
transcutaneously detected inulin clearance and, inherent variability of, in humans [Bauman, Scuderi, Kelly, Lorentz, Watson], A484
function
alterations in, during hyperdynamic sepsis in sheep, changes in systemic and renal plasma prostanoid concentrations associated with; [Morel, Weber], A244
during controlled hypotension with adenosine or sodium nitroprusside in dogs under halothane anesthesia [Jarnberg, Jamond, Westman, Woods], A552
effect of mannitol on, during coronary artery bypass [Gehr, Gehr, Yoch, Nakatsuka, Wolman], A67
hemodynamic changes during hemodiafiltration onset [Merle, Fulgencio, Troche, Zazzo], A276
hemofiltration, cytokines in plasma and ultrafiltrate in relation to [Tonnesen, Hansen, Hohndorf, Bendtzen, Diamant], A266
hormonal influences on, during orthotopic liver transplantation [Roberts, Sakai, Duke, Ramsay, Whitten], A622
ischemic, effects of inhalational anesthetics on, in rats [Yoshimura, Sameshima, Miyao, Oda, Yoshida], A335
not influenced by differences in pH -management and pul-satile/non-pulsatile perfusion during CPB [Badner, Murkin, Lok], A65
proximal and distal sodium reabsorptions, changes in, during standardized anesthesia and surgery in man [Hadj-Aissa, Mercatello, Coronel, Chery, Perrot, Naouri, Pozet, Tissot, Gharib, Moskovtchenko], A359
renal extraction ratio of para amino hippuric acid during anesthesia and surgery in human [Mercatello, Pozei, Martin, Riegert, Long, Baude, Chabrol, Dubernard, Moskovichenko], A142
transplantation
evaluation of proconvulsant effect of laudanosine in recipient [Lepage, Athouel, Vecherini, Malinovsky, Cozian], A781
hemodynamic effects of OKT3 during [Robinson], A139
$\mathbf{L}$

Labetalol. See under Pharmacology
Lactate. See under Metabolism
Laryngeal mask. See under Equipment
Larynx
spasm
laryngospasm during halothane anesthesia, intravenous lidocaine inhibition of, in dogs [Jarnberg, Andersen, Cohen, Jamond, Smith], A971
Lasers. See under Equipment
Latex. See under Pharmacology
L-dopa. See under Pharmacology
Leukocytes. See under Blood
Lidocaine. See under Anesthetics, local
Lipid. See under Metabolism
Liver
blood flow
effect of graded hemorrhage on liver oxygenation and ethanol clearance [Lund, Iannoli, Papadakos, Pearce], A216
effects of acute coronary stenosis, anesthetic agent, and hypotension on [Cork, DiNardo, Hilwig, Kern], A289
oxygen balance and, effects of prostaglandin E1 on, during anesthesia of liver surgery [Kainuma, Nakashima, Sakuma, Kimura, Shimada], A141
regional hemodynamic dose-responses to fenoldopam compared to dopamine in sedated sheep [Schwieger, Schiffer, Poinsot, Klohn, Mentha, Guamann, Morel], A563
during sevoflurane and isoflurane in rats [Vollmar, Conzen, Habazettl, Peter, Messmer], A550
total and splanchnic $\mathrm{O}_{2}$ deliveries, discrepancy between, during dobutamine, dopamine, and norepinephrine [Noldge, Priebe, Armbruster, Muller, Haberstroh, Geiger], A556
after transplantation, effects of nicardipine hydrochloride on [Raucoules, Ichai, Drici, Goubaux, Gugenheim, Grimaud], A220
disease
end-stage, fresh frozen plasma administration in, ionized calcium levels during [Washington, Prager, Kelley, White, Cauldwell], A277
function
effects of sevoflurane on, using low flow system [Yasuda, Mishina, Miyano, Tanifuji, Amaki, Kobayashi], A345
normal versus hepatic dysfunction: pharmacokinetics, onset, and duration of action of rocuronium in humans [Magorian, Wood, Caldwell, Szenohradszky, Segredo, Sharma, Gruenke, Miller], A1069
glucose/insulin decreases potassium level in anhepatic patients [Frenette, De Wolf, Kang, Tang], A217
metabolism
atracurium and its metabolites in isolated perfused rat liver: biochemical and morphological observations [Reckendorfer, Burgmann, Sperlich, Tuchy, Schwarz], A304
fatty acid alterations in phospholipids of perfused rat liver by halothane [Franks, Kruskal, England, Surber, Sastry], A337
microsomal drug, inhibition of, by atracurium administration [Bohrer, Schmidt, Augenstein, Bach, Martin], A356
microsomal ketamine, stereochemical aspects of, in human [Kharasch, Kunze, Herrmann], A382
volatile anesthetic defluorination: role of cytochrome P450IIEI [Kharasch, Thummel], A350
oxygen consumption
blood flow and, effects of prostaglandin El on, during anesthesia of liver surgery [Kainuma, Nakashima, Sakuma, Kimura, Shimada], A141
continuous monitoring of, predicts postoperative liver dysfunction [Nakashima, Kainuma, Sakuma, Kawase, Shimada], A414
effect of graded hemorrhage on [Lund, Iannoli, Papadakos, Pearce], A216
prevention of hepatic ischemic injury-induced coronary vasoconstriction with mannitol or lazaroid [Pretto, Dorko], A221
toxicity
liver cytosolic proteins from halothane-treated mice recognized by antibodies in halothane hepatitis patients' sera [Lindsey, Martin, Pohl], A993
transplantation
changes in IL-6 during [Sakai, Whitten, Roberts, Latson, Krishnan, Lipton, Ramsay, Giesecke], A624
comparative evolution of renal hemodynamics during, with and without veno-venous bypass [Veroli, Elhage, Gillon, Des-corps-Declere, Jayais, Ecoffey], A219
effect of aprotinin on fibrinolysis during [Tartiere, Deshayes, Samba, Le Querrec, Gerard], A218
graft function after, value of total body oxygen consumption as parameter of [Groh, Gerhard, Forst, Welte, Dieterich, Pratschke, Peter], A479
hormonal influences on renal function during [Roberts, Sakai, Duke, Ramsay, Whitten], A622
implications for coagulopathy during: hepatic regulation of fibrinolysis [Kelley, Bissell], A565
on-line assessment of liver graft function by recording neuromuscular transmission during liver transplantation in pigs [Pittet, Mentha, Schopfer, Morel, Benakis, Tassonyi], A815
plasma laudanosine levels in patients receiving continuous atracurium infusions during [Peters, Matsumi, Lawhead, Landers, Becker, Earl], A303
post-reperfusion syndrome in, myocardial depressent effect of plasma from: In Vitro study [Jayais, Chemla, Ecoffey, Des-corps-Declere, Samii, Lecarpentier], A554
rapid increase in sodium associated with CPM after [Videira, Kang, Martinez, DeWolf, Aggarwal, Gasior], A222
reperfusion during, metabolic and ECG changes associated with [Gabrielson, Nam, Reich], A990
reperfusion syndrome during: echocardiographic analysis of ventricular dynamics [Gabriel, Muller, Tuchy, Hackl, Zimpfer], A992
solution for hemodynamic instability that minimizes blood transfusion requirement in [Lin, Lichtor, Emond, Broelsch], A988
transesophageal echocardiography during [Roberts, Duke, Gottlich, Ramsay], A388
vital organ blood flow during deliberate hypotension [Kick, van Aken, Wouters, Verbesselt, an Hemelrijck], A625
Local anesthetics. See Anesthetics, local; See also under Toxicity
Lorazepam. See under Hypnotics
Lung. See also under Complications
acute oxygen-induced amiodarone pulmonary toxicity after general anesthesia [Duke, Ramsay, Herndon, Swygert, Cook], A228
asthma
lack of bronchodilator effect of subanesthetic concentration of isoflurane in [Mercier, Benhamou, Denjean], A972
atelectasis
circulatory effects of gravitational rotation in oleic acid-induced lung injury [Cope, Baisden, Fortier-Bensen, Bifano, Picone], A262
halothane anesthesia effects on, phrenic nerve stimulation during [Hedenstierna, Tokics, Lundquist, Andersson, Strandberg, Brismar], A129
blood flow
effect of almitrine on pulmonary capillary transit times [Emhardt, Hanger, Hanson, Herve, Wagner], A134
ventilation-perfusion index can accurately reflect venous admixture in critically ill patients [Russell, Graybeal, Snider], A237
bronchus
bronchodilatation by ketamine, reinvestigation of mechanism of [Ben-Harai, Bansinath], A627
damage
pulmonary acid injury, effect of duration of anesthetic exposure on [Coleman, Rutter, Tait, Johnson, Knight], A998 edema
circulatory effects of gravitational rotation in oleic acid-induced lung injury [Cope, Baisden, Fortier-Bensen, Bifano, Picone], A262
formation of, eicosanoid production and, halothane-oxidant interactions in Ex Vivo perfused rabbit lung [Shayevitz, Johnson, Knight], A339
effects of high dose salbutamol aerosol on lung histology in rabbits [Spahr-Schopfer, Lerman, Cutz, PEng], A980
function
dynamic respiratory patterns after laparoscopic cholecystectomy [Shulman, Chuter, Weissman], A136
effect of thoracic epidural anesthesia on pulmonary function in normals [Speight, Rauck, Mann], A729
matching of ventilation and perfusion in normal lungs, effect of changes in $\mathrm{PCO}_{2}$ on [Domino, Eisenstein, Lu, Swenson, Hiastala], A128
microsomal ethylmorphine N -demethylase activity inhibited by halothane, in rat lung [Ahmad, Kartha], A336
in oleic acid injury, canine, hypocapnia and hypercapnia increase VA/Q heterogeneity in [Domino, Eisenstein, Lu, Hlastala], A235
pain and pulmonary dysfunction after cholecystectomy under laparoscopy and laparotomy [Cigarini, Joris, Jacquet, Lamy], A122
postoperative pulmonary complications after abdominal surgery: epidural analgesia using bupivacaine and opioid versus subcutaneous morphine [Farhat, Thomas, Rey, Bourgain, Desreunnes, Jayr], A126
postoperative pulmonary function deterioration, prevented by laparoscopic cholecystectomy? [Reed, Han, Sampson], A127
postoperative stress response and, after laparoscopic cholecystectomy [Rademaker, deWit, Ringers, Odoom], A123
pulmonary complications and diaphragm function after laparoscopic cholecystectomy [Sha, Ohmura, Yamada], A255
pulmonary excretion of acetone: conducting airways and time course [Baumgardner, Schreiner, Aukburg, Scherer, Neufeld], A135
ventilation-perfusion index can accurately reflect venous admixture in critically ill patients [Russell, Graybeal, Snider], A237
human, immunohistochemical location of manganese superoxide dismutase in [Noll, Coursin, Cihla], A281
neuropeptides release from guinea-pig lung In Vitro, effects of capsaicin, potassium, and histamine on endotracheal pressure changes and [Hogman, Hua, Grafe, Yaksh], A631
positive end expiratory pressure
effect of, on fentanyl-induced modifications of resistive properties of respiratory system [Cohendy, Lefrant, Laracine, Rebiere, Eledjam], A132
pulmonary artery
effects of amrinone on, during acute and chronic pulmonary hypertension, in conscious dogs [Pribble, Nyhan, Nishiwaki, Rock, Peterson, Tong, Desai, Murray], A567
pressures of, estimated by transesophageal echocardiography? [Muhiudeen, Oken, Kuecherer, Schiller, Cahalan], A. 384
respiratory complications, risk factors for, after cardiac surgery [Higgins, Yared, Paranandi, Baldyga, Starr], A258
respiratory distress syndrome
cytokine elevation in children with sepsis syndrome and [Costarino, Sullivan, Harris, Kilpatrick], A245
necrotizing pancreatitis complicated by, release of cytokines in plasma and lymph during [Montravers, Chollet-Martin, Pasquier, Gauzit, Marmuse, Fichelle, Gougerot-Pocidalo, Desmonts], A265
respiratory resistance
bronchoconstriction caused by histamine or acetylcholine, effect of sevoflurane on [Katoh, Ikeda], A973
bronchodilatation by ketamine, reinvestigation of mechanism of [Ben-Harai, Bansinath], A627
effect of PEEP on fentanyl-induced modifications of resistive properties of respiratory system [Cohendy, Lefrant, Laracine, Rebiere, Eledjam], A132
pulmonary excretion of acetone: conducting airways and time course [Baumgardner, Schreiner, Aukburg, Scherer, Neufeld], A135
shunting
pulmonary, increased by abdominal mesenteric traction [Seltzer, Ritter, Starsnic, Torjman, Marr, Schieren], A118

## trachea

acetylcholine-induced muscle contraction, cytosolic ionized calcium concentration decreased by halothane during, in dog [Jones, Housmans, Warner, Rehder], A639
release of calcitonin gene-related peptide from, induced by electrical field stimulation, capsaicin, and potassium, in rat [Hua, Yaksh], A632
smooth muscle, canine, effect of halothane on: role of cytosolic $\mathrm{Ca}^{2+}$, cAMP and protein kinase C [Yamakage, Namiki], A354
vasculature
biphasic tension response to $\mathrm{K}^{+}$, caused by halothane, in isolated pulmonary artery [Fehr, Schuler, Rhone, Larach], A566
catecholamines cause pulmonary hypertension but not edema in isolated pig lung [Toung, Reily, McPherson, Traystman], Al021
effects of amrinone, during acute and chronic puimonary hypertension, in conscious dogs [Pribble, Nyhan, Nishiwaki, Rock, Peterson, Tong, Desai, Murray], A567
hypoxic pulmonary vasoconstriction during one-lung-ventilation, direct measurement of effects of isoflurane anesthesia on [Groh, Kuhnle, Kubler, Goetz, Peter], A341
influence of moderate hypocapnia on pulmonary vascular tone following mitral valve replacement [Mahdi, Salem, Joseph, Paulissian, Hernandez], A166
inhaled nitric oxide dilates human hypoxic pulmonary vasoconstriction without causing systemic vasodilation [Frostell, Blomqvist, Lundberg, Hedenstierna, Zapol], A989
pulmonary hypertension, inhaled nitric oxide in, following mitral valve replacement [Girard, Lehot, Clerc, Ffrench, Estanove], A984
volume
automated determination of, as guide for respirator adjustment during controlled mechanical ventilation [Putensen, Baum, Hormann], A1015
Lymphocytes. See under Blood

## M

MAC. See under Potency, anesthetic
Magnesium. See under Ions
Magnetic resonance imaging. See under Equipment, magnetic nuclear resonance
Malignant hyperthermia. See under Hyperthermia
Masks, anesthesia. See under Equipment
Measurement techniques
anesthetics
infrared monitors, adverse effect of respiratory rate on volatile anesthetic reporting in [Jameson, Popic], A418
assessment of sympathetic function during anesthesia, new approach to [Deegan, He, Wood, Wood], A560
automated real-time analysis of transesophageal echocardiograms [Cahalan, Ionescu, Melton], A385
bedside PT and PTT coagulation monitor, clinical validation of [Reich, DePerio], A430
biplane transesophageal echocardiography, comparison of mitral valve regurgitant jet areas by [Carter, Davis], A389
blood flow
cerebral, during isoflurane anesthesia, monitored by transcranial Doppler sonography [Werner, Hoffman, Kochs, Schulte am Esch, Albrecht], A616
regional myocardial, during cardiac surgery: measurement using Xe ${ }^{133}$ clearance with miniature epicardial detectors [Butterworth, Stump, Royster, Prielipp, Kon], A97
blood pressure
central and peripheral intraarterial, in ICU patients receiving infusion of vasoconstrictive agents, comparison of [Barr, Mihm, Gaeta], A283
breath-by-breath method for measuring respiratory quotient, validation of [Hoffman, Torres, Sportiello, Forster], A131

## cardiac output

arterial pulse contour analysis trending of,: hemodynamic manipulations during neurosurgery [Weissman, Ornstein, Young], A469
from combination of arterial pressure waveform bioimpedance and vascular R-C model [Djordjevich, Ivankovich], A480
comparison between pulse contour, Doppler, and thermal dilution [Scanlon, Smith], A466
continuous, by pulse contour method, accuracy of, under changes in systemic vascular resistance [Specht, Apenburg, Wichmann, Reinhart], A457
continuous, pulse contour method of, based on estimation of admittance [Gratz, Kraidin, Larijani, de Castro], A454
errors in, ventilation, thermal noise and, after cardiopulmonary bypass [Latson, Whitten, Elmore, Wiley, O'Flaherty], A478
impedance cardiography: validity of intraoperative measurements [Perrino, O'Connor, Ariyan, Lippman], A472
method for use during anesthesia [Clark, Lin, Jones, Koppert, Swier], A477
room temperature versus iced injectate using REF-1 pulmonary artery catheter [Profeta, Roth, Wiener], A458
thermodilution RVEF measurements consistently underestimate RV function under conditions of color-flow Doppler defined tricuspid regurgitation [Rafferty, Durkin, Hines, O'Connor], A108
witnessed right atrial injectate thermodilution right ventricular ejection fraction reproducibility correlates [Rafferty, Durkin, Hines, O'Connor], A461
comparison of thromboelastography and platelet aggregometry [Tuman, McCarthy, Patel, Patel, Ivankovich], A433
comparison of transcutaneous detection of glomerular filtration rate with inulin clearance [Bauman, Kelly, Scuderi, Lorentz, Watson], A435
dipyridamole thallium scintigraphy and gated radionuclide angiography, unreliability of, in assessment of cardiac risk before abdominal aortic surgery [Baron, Mundler, Bertrand, Vicaut, Coriat, Kieffer, Viars], A100
Doppler ultrasound
aeric microemboli and transcranial Doppler: episodic frequency and timing in open heart surgery [Albin, Hantler, Mitzel, Bunegin, Grover], A53
transcranial Doppler sonography monitors changes in cerebral blood flow during isoflurane anesthesia [Werner, Hoffman, Kochs, Schulte am Esch, Albrecht], A616
transtracheal, in pediatric patients, effects of growth on measurements [Saeki, Namba, Nakayama, Tokioka, Morita, Hirakawa], A459
dye, ischemic-hypoxia injury in cultured neurons and astrocytes measured by [Juurlink, Sochocka, Hertz, Shuaib, Cole], A610
gas tension
adaptive digital filter provides better real-time predictions of expired anesthetic gases than classic physiologic model [Gibby, Martinez], A496
bedside blood gas and electrolyte monitoring in critically ill patients [Prielipp, Zaloga, Dudas, Black], A485
effect of alcohols and acetone on 3.3NM infrared anesthetic agent monitors [Volgyesi, Crawford], A488
photoacoustic analyzer, clinical evaluation of [Abenstein, Welna], A463
sources of error in gas analysis, phase delay and frequency response as [Hoffman, Weigle], A470

## hemodynamics

thermodilution RVEF measurements consistently underestimate RV function under conditions of color-flow Doppler defined tricuspid regurgitation [Rafferty, Durkin, Hines, O'Connor], A108
left ventricular performance, effects of urapidil and clonidine on [Lepage, Pinaud, Malinovsky, Cozian, Souiron], A137
lidocaine sensitive electrode [Yokono, Yokono, Ogli, Satake, Kaneshina], A358
metabolic breath-by-breath, methodology for In Vitro validation of [Weissman, Sardar, Kemper], A400
myocardial tissue impedance to determine esmolol's effectiveness to protect against ischemia [Howie, Romaneli, Hiestand, Liu, Rezaei, McSweeney], A443
neural network for quantification of air embolism [Fine, Orr, Westenskow, Kuck], A465
new compact monitor, evaluation of intraoperative monitoring of prothrombin time and activated partial thromboplastin time with [Samama, Faure, Riou, Ankri, Arock, Guillosson, Viars], A438
nuclear magnetic resonance
nuclear magnetic resonance evaluation of six ventilators within [Klein, Blanch], A403
position of laryngeal mask airway as determined by [Denman, Goudsouzian, Cleveland, Shorten], A1045
oximeters
hyperventilation reduces skin blood flow and transcutaneous oxygen in extremities [Barker, Hyatt, Clarke], A409
pulse oximetry does not reduce postoperative complications: prospective study of 20,802 patients [Moller, Pedersen, Johannessen, Rasmussen, Espersen, Dyrlund, Jensen, Rasmussen, Ravlo, Chraemmer-Jorgensen, Djernes, WibergJorgensen, Cooper, Gravenstein, Johansen], A867
pulse oximetry uncovers hypoxemia and decreases incidence of evidence for myocardial ischemia during anesthesia: prospective study of 20,802 patients [Moller, Ravlo, Jensen, Rasmussen, Dyrlund, Espersen, Pedersen, Rasmus sen, Johannessen, Chraemmer-Jorgensen, Djernes, Wiberg-Jorgensen, Cooper, Gravenstein, Johansen], A1057
reliability of, during laparoscopic surgery for cholecystectomy [Nyarwaya, Samii, Mazoit, De Watteville], A453
use of pulse oximetry as predictor of post-anesthesia care unit duration in smokers and nonsmokers [Handlin, Baker], A903
pediatric transesophageal echo: evaluation of feasibility and utility in 129 examinations [Sorensen, Stevenson], A391
pulse monitor
oximetry, real and false positive alarms during pediatric anesthesia [Rolf, Cote], A476
spectroscopy
near infrared reflectance, noninvasive monitoring of mixedvenous oxygen saturation in infants by [Steven, Kurth, Phoon, Nicolson, Chance], A413
near-infrared, noninvasive measurement of brain oxygenation with, influence of tissue layers on [Snyder, Williams, Brem, Eleff, Norris, Hanley], A208
noninvasive optical, during general anesthesia, evaluation of [Koorn, Silvay, Weiss-Bloom, Neutsein], A415
photoacoustic,: effects of anesthetic gas mixtures and of ethanol [Alphin, Guyton], A419
thermodilution versus 2-D transesophageal echocardiography: right ventricular ejection fraction measurement [Koorn, Reich, Tamman, Narang, Hillel], A386
thromboelastography, effect of delay and storage on whole blood clotting analysis as determined by [Rocke, Orlikowski, Murray], A428

## tomography

computerized, selective neurolysis of cranial nerve using [Jain, Alagesan, Harris, Chiang], A748
transcranial sonography, in estimation of embolic air volume in middle cerebral artery [Bunegin, Wahl, Albin], A471
transcutaneously detected inulin clearance and, inherent variability of, in humans [Bauman, Scuderi, Kelly, Lorentz, Watson], A484
transesophageal echocardiography, gastroesophageal injury and [Hulyalkar, Ayd, Casella], A387
ultrasound
cerebral perfusion mapping with [Rampil], A1006
urine drug testing in anesthesia, advance for: norfentanyl is detectable in urine for 48 hours [Silverstein, Reiders, McMullin, Schulman, Zahl], A895

## Mechanical ventilation. See under Ventilation

Medetomidine. See under Sympathetic nervous system, alphaadrenergic agonists

## Medicolegal

anesthesia personnel, neonatal resuscitation, and courts [Heyman, Joseph, Salem, Heyman], A1074
postoperative complications, not reduced by pulse oximetry: prospective study of 20,802 patients [Moller, Pedersen, Johannessen, Rasmussen, Espersen, Dyrlund, Jensen, Rasmussen, Ravlo, Chraemmer-Jorgensen, Djernes, Wiberg-Jorgensen, Cooper, Gravenstein, Johansen], A867
postoperative complications, when do they occur? prospective study of 20,802 patients [Johannessen, Jensen, Moller], A863
should urinalysis be required before elective outpatient surgery? are legislators correct? [Apfelbaum, Gronert, Murray, Grogono, Thisted, Duke, Rupani, Malhotra, Coalson, Lichtor, Finn, Roizen, Graham, Kritch], A1107
Memory
comparative amnesic effects of midazolam and diazepam: quantitative assessment [Parris, Schwartz, Bean, Johnson, Fraifeld], A1031
effect of intranasal midazolam on, in pediatric patients [Twersky, Hartung, McClain, Berger, Beaton], A919
propofol in sedative doses is amnestic agent [Veselis, Reinsel, Marino, Wronski], A1023
retrograde amnesia, is it produced by general anesthesia in unpremedicated children? [Halpern, Lerman], A928
therapeutic suggestions administered during general anesthesia, ineffectiveness of [Ghoneium, Block, Sum Ping, Ali], A1027
Meperidine. See under Analgesics
Mepivacaine. See under Anesthetics, local
Mesenteric reflexes. See under Reflexes
Messenger hormones. See under Hormones
Metabolic acidosis. See under Acid-base equilibrium
Metabolism. See also under Brain; Cells; Heart; Liver; Muscle, skeletal
adenosine triphosphate
ATP-sensitive $\mathrm{K}^{+}$current, activation of [Deutsch, Klitzner, Weiss], A555
diabetes
regional changes in cerebral endothelium-dependent vascular relaxation in, in rat [Pelligrino, Albrecht], A547
dichloroacetate enhances myocardial recovery following global ischemia [Wahr, Childs, Olsanski, Bolling], A521
effect of prolonged administration of sevoflurane on serum concentration of fluoride ion in patients [Kazama, Ikeda], A346
effects of impact administration on, in critically ill [Singer, Katz, Bursztein, Pollack, Kvetan, Askanazi], A270

## glucose

acute metabolic acidosis in fetal lamb following maternal labetalol administration [Yeleswaram, Rurak, Hall, McMorland, Axelson], A1076
association between blood glucose level during cardiopulmonary bypass and neuropsychiatric outcome [Frasco, Croughwell, Blumenthal, Will, Leone, White, Goodman, Reves], A55
blood glucose and electrolyte changes following perioperative use of three hydrating solutions in children [Dubois, Gouyet, Murat, Saint-Maurice], A945
decreases potassium level in anhepatic patients [Frenette, De Wolf, Kang, Tang], A217
diabetic patients, severity of surgery and glycemic control in [Raucoules, Lugrin, Ichai, Deloffre, Grimaud], A282
infusion, effects of, on amino-acid blood levels after minor surgery [Guidon-Attali, Latiere, Bruder, Francois], A357
ischemia and reperfusion in newborn heart: effect of glucose [McGowan, Downing], A1046
in nondiabetic subjects during perioperative period [Feinstein, McGill, Hirsch], A623
preoperative blood test, use of technology to improve patient -selection for [Meyer, Roizen, Murray, Gronert, Grogono, Duke, White, Thisted, Apfelbaum, Disbrow, Lichtor, Uitvlugt, Rupani, Erickson, Summerell, Schimittner, Texidor], A441
hyperglycemia
following induction with thiopental in healthy women [Amar, Shamoon, Lazar, Salama, Frishman], A206
hypoglycemia
hypercapnic cerebral blood flow reactivity blunted by, in piglets [Jacques, Kirsch, Traystman], A545
hypoxia versus, role of adenosine in CBF increases during, in rat [Pelligrino, Albrecht, Hoffman], A546
inorganic fluoride production following sevoflurane in healthy surgical patients [Morgan, Frink, Ghantous, Gandolfi, Brown], A349
insulin
decreases potassium level in anhepatic patients [Frenette, De Wolf, Kang, Tang], A217
insulin response during regional anesthesia in children [Gouyet, Dubois, Murat, Saint-Maurice], A944

## lactate

acute metabolic acidosis in fetal lamb following maternal labetalol administration [Yeleswaram, Rurak, Hall, McMorland, Axelson], A1076
lipid
excessive acylation of triglycerides in muscle from swine exhibiting clinical malignant hyperthermia: evidence of heterogeneity in pathogenesis of MH [Fletcher, Erwin, Tripolitis, Yudkowsky, Rosenberg], A298
fatty acids markedly lower threshold for halothane-induced $\mathrm{Ca}^{2+}$ release from terminal cisternae: implications for malignant hyperthermia [Fletcher, Mayerberger, Tripolitis, Yudkowsky, Rosenberg], A297
inhibition of brown fat heat production by inhalation anesthetic agents [Ohlsson, Lindahl, Mohell, Cannon, Nedergaard], A340
oxygen consumption
clonidine prevents postoperative increase in $\mathrm{VO}_{2}$ Delaunay, Bonnet, Liu, Duvaldestin], A981
metabolic effects of corrective operations in infants and children with congential heart defects [Puhakka, Rasanen, Leijala, Peltola], A965
metabolic monitoring of early repayment phase following aortic unclamping: comparison of patients with abdominal aortic aneurysm and vascular occlusive disease [Roberts, Cohen, Perkins, Robbiano, Shah], A149
relationship between oxygen delivery and, during and following cardiopulmonary bypass [Abrante, Sheikh, Perkins, Raghavan, Samuel, Lumb, Cohen], A66
protein
alanine turnover, effect of exogenous epinephrine on [Trager, Ensinger, Anhaupl, Georgieff, Rugheimer], A274
amino-acid blood levels after minor surgery, effects of glucose infusion on [Guidon-Attali, Latiere, Bruder, Francois], A357
catabolism, urea and total urinary nitrogen as measures of [Hyman, Naukam, Flakoll], A264
respiratory quotient
measurement of, validation of breath-by-breath method for [Hoffman, Torres, Sportiello, Forster], Al31
response to chest physical therapy: stressing critically ill patient [Weissman, Kemper], A238
serum and urinary inorganic fluoride levels after prolonged inhalation of sevoflurane in man [Kobayashi, Ochiai, Takeda, Sekiguchi, Fukushima], A348
serum inorganic fluoride after extended exposure to sevoflurane [Toriumi, Ozaki, Yasuda, Tanifuji, Amaki], A347
Methadone. See under Analgesics
Methohexital. See under Anesthetics, intravenous
Methoxyflurane. See under Anesthetics, volatile
Methylparaben. See under Pharmacology
Methynaltrexone. See under Antagonists, narcotic
Metoclopramide. See under Pharmacology
Metocurine. See under Neuromuscular relaxants
Meyer-Overton rule. See under Theories of anesthetic action
Midazolam. See also under Anesthetics, intravenou
Hypnotics response of human CNS sodium channels to [Frenkel, Urban], A646
Milrinone. See under Pharmacology
Mitral valve. See under Heart
Mivacurium. See under Neuromuscular relaxants
MK-801. See under Pharmacology
Monitoring, See also under Blood pressure; Carbon dioxide; Oxygen; Temperature
blood pressure
arterial, noninvasive continuous monitoring of, using bioimpedance [Djordjevich, Ivankovich], A1012
carbon dioxide
capnography: new $\mathrm{CO}_{2}$ sampling nasal cannula [Roth, Wiener, Barth, Profeta], A481
real and false positive capnography alarms during pediatric anesthesia [Rolf, Cote], A476
electrocardiography
preoperative, use of technology to improve patient selection for [Meyer, Roizen, Murray, Gronert, Grogono, Duke, White, Thisted, Apfelbaum, Disbrow, Lichtor, Uitvlugt, Rupani, Erickson, Summerell, Schimittner, Texidor], A441
neuromuscular function
dual innervation of hand muscles potential influence on [Halevy, Brull, Booke, Garcia, Silverman], A814
on-line assessment of liver graft function by recording neuromuscular transmission during liver transplantation in pigs [Pittet, Mentha, Schopfer, Morel, Benakis, Tassonyi], A815
with submaximal stimulation of nerve [Storella, Simpson, Hill], A812
train-of-four hysteresis during computer-assisted continuous infusion of vecuronium [Epstein, Bartkowski, Wilkerson, Lessin, Marr], A817
of orbicularis oculi is accurate indicator of vocal cords relaxation in atracurium-induced neuromuscular blockade [Ungureanu, Meistelman, Frossard, Donati], A.797
oxygen
continuous arterial $\mathrm{PaCO}_{2}$ measurement, performance of luminescent sensor for [Biondi, Friedman], A404
oxygenation: new $\mathrm{CO}_{2}$ sampling nasal cannula [Roth, Wiener, Barth, Profeta], A481
real and false positive pulse oximetry alarms during pediatric anesthesia [Rolf, Cote], A476
pressure
fast flush technique does measure dynamic frequency response of entire monitoring system [Kleinman, Powell, Kumar, Gardner], A452
ventilation
breath-by-breath metabolic measurements, methodology for $I n$ Vitro validation of [Weissman, Sardar, Kemper], A400
noninvasive respiratory, In Vitro and In Vivo evaluation of [Cigada, Sebastianelli, Fordyce, Camporesi], A398
Morbidity. See under Complications
Morphine. See under Analgesics

## Muscle, skeletal

contractility
concentration-dependent tetanic contraction induced by subarachnoid disodium EDTA: prevention by $\mathrm{CaCl}_{2}$ pretreatment [Wang, Li, Hiller, Simon, Budzilovich], A651
ryanodine contractures in malignant hyperthermia, diagnostic evaluation of [Nelson], A302
diaphragm
differential sensitivity to halothane anesthesia of genioglossus, intercostals and: comparison between kittens and adult cats [Ochiai, Guthrie, Motoyama], A925
function of, pulmonary complications and, after laparoscopic cholecystectomy [Sha, Ohmura, Yamada], A255
human, neuromuscular blocking effect of ORG 9426 on [Cantineau, Porte, Homs, Liu, Duvaldestin], A785
limit of activation of, during resistive breathing [Goldman, Walsh, Romano, Comtois, Grassino]; A124
muscle relaxant effects in thumb, larynx, and diaphragm: novel pharmacodynamic analysis [Bragg, Fisher, Donati, Meistelman, Sheiner], A799
metabolism
altered, in humans diagnosed as malignant hyperthermia susceptible [Fletcher, Jiang, Gong, Rosenberg], A638
inositol triphosphate and malignant hyperthermia in human skeletal muscle [Scholz, Hartung, Troll, Patten, Schulte am Esch], A641
systemic oxygen uptake dependency on oxygen delivery with dobutamine and enoximone administration not explained by [Francois, Mebazaa, Mateo, Lucas, Payen], A257
myoglobin
myoglobinemia induced by succinylcholine, effectively reduced by ketamine [Noguchi, Amamiya, Andou, Sankawa], A299
Myasthenia gravis. See under Complications
Myocardial blood flow. See under Heart
Myocardial function. See under Heart
Myocardial infarction. See under Complications; Heart
Myoglobin. See under Muscle, Skeletal

## N

[^0]$A \delta$ and $C$ fiber endings, injury-induced responses of [MacIver, Tanelian], A598
block
brachial plexus, adding fentanyl and clonidine to mepivacaine results in rapid onset and prolonged anesthesia and analgesia after [Singelyn, Muller, Gouverneur], A653
digital, for pulse oximetry failure [Grayson, Bourke], A407
intrapatellar, for chronic pain following diagnostic knee arthroscopy [Trankina], A738
laryngeal, superior, for laryngoscopy and intubation [Taniguchi, Fukunaga, Harano, Totoki, Takasaki], A81
local anesthetic, effects of verapamil on [Cohn, Laurito], A688 prolonged sciatic, with bupivacaine using biodegradable polymer matrix, biochemical and histologic effects of [Masters, Berde, Ward, Martyn, Kupsky], A680
prolonged sciatic nerve blockade, using sustained release of bupivacaine from biodegradable polymer matrix [Masters, Berde, Dutta, Langer], A765
sensory and motor, of rat sciatic nerve In Vivo produced by $\mathrm{Na}^{+}$ channel activator veratridine [Strichartz, Drachman, Latka, Feldman], A771
tonic nerve ending discharge versus axonal conduction, differential effects of lidocaine on [Tanelian, MacIver], A683
C-fiber action potential, effects of clonidine on, interaction with lidocaine [Gaumann, Brunet, Jirounek, Morel, Volet], A656
cranial, IX and X: anatomic study [Woods, Lee, Reikersdurfer, Lander], A742
damage (postoperative)
peripheral nerve palsies and pancreatic surgery: preliminary appraisal [Viel, Joubert, de la Coussaye, Cohendy, Saissi, Pelissier, Eledjam], A1061
intracellular $p \mathrm{H}$ in C fibers, halothane inhibits regulation of [Kracke, Mills, Drake], A597
ketamine neurotoxicity, chlorbutanol is responsible for, in rabbits [Malinovsky, Lepage, Mussini, Cozian, Pinaud], A650
neurolysis of cranial nerve, selective, using computerized tomography [Jain, Alagesan, Harris, Chiang], A748
peripheral, human, opioid peptides in [Brooks, Rattan, Gupta, Tejwani], A591
sciatic nerve ligation increases mRNA coding for substance $P$ and dynorphin in spinal cord, in rat [Carpenter, Nepom, Yaksh, Yamamoto], A1089
sodium channels derived from muscle and, differential effects of pentobarbital on [Wartenberg, Wange, Urban, Duch], A1036
Neurolept analgesia. See under Anesthetic techniques
Neuromuscular function. See also under Monitoring
potentiation of neuromuscular blockade by cyclosporine not mediated by pre or postsynaptic membrane effects [Sharpe, Gelb, Brown, Veitch, Henderson], A791
refractoriness of neuromuscular transmission, computer-aided assessment of [Lee, Tsai, Lin], A805
secondary neuromuscular blockade, may be induced by autologous blood transfusion [Montefiore, Boico, Deghani, Bonnet, Zetlaoui], A795
twitch response of rabbit tibialis anterior muscle, effect of temperature on [Fauvel, Feldman], A809

## Neuromuscular relaxants

atracurium
airway constriction following, is due to histamine release [Mehr, Lindeman, Hirshman], A974
continuous infusion of, during orthotopic liver transplantation, plasma laudanosine levels in [Peters, Matsumi, Lawhead, Landers, Becker, Earl], A303
developmental toxicity of non-depolarizing muscle relaxants in cultured rat embryos [Fujinaga, Baden, Mazze], A850
double-burst characteristics of, in children [Crawford, Bissonnette], A811
effect of, on sympathetic nerve activity [Yoneda, Nishizawa, Benson, Goto, Arakawa], A780
effects of, on elevated intracranial pressure during routine endotracheal suction [Klezl, Werba, Illievich, Schramm, Spiss], A211
evaluation of proconvulsant effect of laudanosine in renal transplant recipient [Lepage, Athouel, Vecherini, Malinovsky, Cozian], A781
histamine release following, in elderly [Shorten, Goudsouzian, Ali], A782
inhibition of hepatic microsomal drug metabolism by [Bohrer, Schmidt, Augenstein, Bach, Martin], A356
iontophoretic study of speed of action of [Law Min, Bekavac, Glavinovic, Donati, Bevan], A810
and metabolites in isolated perfused rat liver: biochemical and morphological observations [Reckendorfer, Burgmann, Sperlich, Tuchy, Schwarz], A304
neuromuscular blockade induced by, monitoring orbicularis oculi is accurate indicator of vocal cords relaxation in [Ungureanu, Meistelman, Frossard, Donati], A797
optimizing dosing of, to allow for variation in body somatotype [Beemer, Bjorksten, Crankshaw], A778
paralysis induced by, succinylcholine enhances recovery from [Huang, Simpson], A783
resistance to, in muscles under thermally-injured skin in rat [Pavlin, Howard, Slattery], A779
vecuronium versus, comparison of effects of: outpatient anesthesia [Zahl, Wetchler, Kallar, Bogetz], A1106

## doxacurium

iontophoretic study of speed of action of [Law Min, Bekavac, Glavinovic, Donati, Bevan], A810
gallamine
iontophoretic study of speed of action of [Law Min, Bekavac, Glavinovic, Donati, Bevan], A810
metocurine
decreased sensitivity to, during chronic phenytoin may be due to protein binding and receptor changes [Martyn, Kim], A640
elimination of, by hemofiltration in patients undergoing cardiopulmonary bypass [Hogue, Itani, Martyn], A801
mivacurium
autonomic and neuromuscular effects of, in cats [Maehr, Blemont, Wray, Savarese, Wastila], A772
comparative pharmacology of, in cats [Belmont, Wray, Maehr, Savarese, Wastila], A773
dose-response relationship of, in infants during nitrous oxidehalothane anesthesia [Woelfel, Brandom, McGowan, Cook], A775
neuromuscular block induced by, duration of action of, in patients homozygous for atypical plasma cholinesterase gene [Ostergaard, Jensen, Jensen, Viby Mogensen], A774
pharmacokinetics of two isomers of, in cat [Wray, Belmont, Maehr, Welch, Wastila], A305
ORG 9426
administration of, using new radioimmunoassay, evaluation of histamine release following [Davis, Szlam, Lowdon, Levy], A818
comparison of onset and recovery of neuromuscular block after vecuronium and [Bartkowski, Witkowski, Azad, Marr, Lessin], A1071
dose response of, in children anesthetized with halothane [Bikhazi, Marin, Mouhanna, Halliday, Foldes], A1067
dose-response relationship of, during halothane, isoflurane, enflurane, and intravenous anesthesia [Oris, Vandermeersch, van Aken, Crul], A1063
evaluation of cumulative properties of [Khuenl-Brady, Puhringer, Koller, Mitterschiffthaler], A1064
increase of dose shortens onset time [Mayer, Doenicke, Angster, Hoffman, Peter], A1070
infusion requirements in children during halothane anesthesia [Brandom, Woelfel, Sarner, Cook], A1072
infusion requirements of, in patients receiving balanced, enflurane, or isoflurane anesthesia [Shanks, Fragen, Ling, Pemberton, Dunn, Howard], A1068
intubation conditions and time-course of action of [Vandenbrom, Wierda, Huizinga, Hennis], A788
neuromuscular and cardiovascular properties of [Mellinghoff, Diefenbach, Buzello], A807
neuromuscular blockade at adductor muscles of larynx and adductor pollicis in man [Plaud, Meistelman, Donati], A784
neuromuscular blockade following, in children during $\mathrm{N}_{2} \mathrm{O}$ halothane anesthesia [O'Kelly, Frossard, Meistelman, Ecoffey], A787
neuromuscular blocking effect of, on human diaphragm [Cantineau, Porte, Homs, Liu, Duvaldestin], A785
onset, intubating conditions, and clinical duration [Tullock, Wilks, Brandom, Cook], A789
pharmacokinetics and pharmacodynamics of, in elderly surgical patients [Matteo, Ornstein, Schwartz, Stone, Ostapkovich, Spencer, Dee], A1065
pre- and postsynaptic effects of, during onset of and recovery from neuromuscular blockade [Watanabe, Chen, Ohta, Nagashima, Foldes], A798
protein binding of, and inhibitory effect on human cholinesterase [Chaudhry, Foldes, Ohta, Nagashima], A786
used for endotracheal intubation: comparison with succinylcholine [Dubois, Shearrow, Tran, Kataria, Rever, Gadde, Lea], A1066
pancuronium
developmental toxicity of non-depolarizing muscle relaxants in cultured rat embryos [Fujinaga, Baden, Mazze], A850
double-burst characteristics of, in children [Crawford, Bissonnette], A811
EEG effect of isoflurane potentiated by, in dogs [Schwartz, Navedo, Berman], A792
pipecuronium
accelerated recovery from, in neurosurgical patients treated with chronic carbamazepine therapy [Modica, Tempelhoff, Jellish, Williams], A187
interaction of antibiotics on neuromuscular blockade induced by [de Gouw, Crul, Vandermeersch, Mulier, van Aken], A776
pharmacokinetics of, in infants, children, and adults [Tassonyi, Pittet, Schopfer, Gemperle, Rouge, Morel], A777
practice patterns of anesthesia intensivists in use of, national survey on [Klessig, Geiger, Murray, Cousins], A290

## rocuronium

pharmacokinetics, onset, and duration of action of, in humans: normal versus hepatic dysfunction [Magorian, Wood, Caldwell, Szenohradszky, Segredo, Sharma, Gruenke, Miller], A1069
succinylcholine
dose-response in hyperparathyroidism [Roland, Villiers, Lequeau, Roupie, Sarfate, Eurin], A808
effect of, on intracranial pressure, cerebral blood flow velocity and electroencephalogram in patients with neurologic disorders [Kovarik, Lam, Slee, Mathisen], A207
effect of, on intraocular pressure, in human eye with extraocular muscles detached [Kelly, Dinner, Turner, Abramson, Haik, Daines], A804
effect of hypercapnia, hypertension and, in experimental osteofascial compartment syndrome [Varlotta, DiPasquale], A816
enhances recovery from atracurium-induced paralysis [Huang, Simpson], A783
increases $\mathrm{PETCO}_{2}$ in dose dependent manner [van der Spek], A300
myoglobinemia induced by, effectively reduced by ketamine [Noguchi, Amamiya, Andou, Sankawa], A299
used for endotracheal intubation: comparison with ORG 9426 [Dubois, Shearrow, Tran, Kataria, Rever, Gadde, Lea], A1066
d-tubocurarine
developmental toxicity of non-depolarizing muscle relaxants in cultured rat embryos [Fujinaga, Baden, Mazze], A850
iontophoretic study of speed of action of [Law Min, Bekavac, Glavinovic, Donati, Bevan], A810
neuromuscular blockade induced by, electrophysiological study on antagonism of, by edrophonium and neostigmine [Narimatsu, Ohta, Iwasaki, Namiki], A796
post-tetanic events in absence and presence of, in man [Stanec, Badach, Fernandez, Winikoff, Umanoff], A806
vecuronium
antagonism of, by one of its metabolites In Vitro [Khuenl-Brady, Mair, Koller], A800
atracurium versus, comparison of effects of: outpatient anesthesia [Zahl, Wetchler, Kallar, Bogetz], A1106
comparison of onset and recovery of neuromuscular block after ORG 9426 and [Bartkowski, Witkowski, Azad, Marr, Lessin], A1071
computer-assisted continuous infusion of, train-of-four hysteresis during [Epstein, Bartkowski, Wilkerson, Lessin, Marr], A817
demand controlled infusion of [Gilly, Andel, Lackner, Sauberer, Foldes], A1009
developmental toxicity of non-depolarizing muscle relaxants in cultured rat embryos [Fujinaga, Baden, Mazze], A850
double-burst characteristics of, in children [Crawford, Bissonnette], A811
infusion, reduction in dose requirements by nicardipine in humans [Sumikawa, Kawabata, Kamibayashi, Kita, Yoshiya], A793
kinetic and dynamic parameters of, influence of blood sampling schedule on [Ducharme, Varin, Theoret, Bevan, Donati], A803
muscle relaxanteffects in thumb, larynx, and diaphragm: novel pharmacodynamic analysis [Bragg, Fisher, Donati, Meistelman, Sheiner], A799
neuromuscular block, do antiarrhythmic doses of magnesium potentiate it? [Butterworth, Frawley, Dudas, Cole], A802
neuromuscular block, high-dose regimen of triamcinolone induces resistance to, in cats [Baker], A790
optimal dose and priming interval, in children [WoloszczukGebicka, Forestner, Furman], A951
twitch depression induced by, effects of dexmedetomidine on, in rat model [Henry, Weinger, Partridge], A794
versatile computer-controlled closed-loop system for continuous infusion of [Assef, Jones, Lennon, Burke, Behrens], A467
Neurosurgical anesthesia. See under Anesthesia
Nicardipine. See under Pharmacology
Nicotinic receptors. See under Parasympathetic nervous system
Nimodipine. See under Pharmacology
Nitroglycerin. See under Heart
Nitroprusside. See under Pharmacology
Nitrous oxide. See under Anesthetics, gases
Norepinephrine. See under Pharmacology; Sympathetic nervous system
Nuclear magnetic resonance. See under Measurement techniques
Nurse anesthetists. See under Personnel

## Obstetric anesthesia. See under Anesthesia

Ondansetron. See under Pharmacology

## Operating rooms

DNR orders in: survey of anesthesiologists' opinions and concerns [Boyd, Boudreaux], A900
does regional anesthesia significantly delay surgery? retrospective study [Nichols, Nagel, Gantt], A884
personnel, reduced exposure to halothane and nitrous oxide by, during induction of anesthesia in children using double mask system [Weber, Unterberger, Gangoly], A927
U.S. Anesthesiology Department Policies, study of: do not resuscitate orders in presurgical patient [Rothenberg, Franklin, Ivankovich, McCarthy], A907
Ophthalmologic anesthesia. See under Anesthesia
ORG 9426. See under Neuromuscular relaxants
Organ transplantation. See under specific organs; Surgery
Orthopedic anesthesia. See under Anesthesia
Otolaryngologic anesthesia. See under Anesthesia
Outpatient anesthesia. See under Anesthesia
Oximeters. See under Measurement techniques
Oxygen. See also under Monitoring
blood levels
relationship between oxygen delivery and mixed venous oxygen saturation during septic shock [Levraut, Jambou, Kaidomar, Grimaud], A234

## consumption

continuous measurement of oxygen supply and, first data on new monitoring concept [Specht, Wichmann, Apenburg, Johnson, Reinhart], A456
estimation of $\mathrm{O}_{2}$ deficit and debt resulting from abdominal aortic crossclamping in humans [Perkins, Roberts, Shah, Feustel, Cohen], A113
improvement of, by pentoxifylline in patients with septic shock [Steltzer, Mayer, Weinstabl, Oismuller, Hammerle], A231
measurement of, by indirect calorimetry during continuous breathing circuit flow [Rasanen], A410
oxygen delivery and, in brain dead patients [Mateo, Langeron, Pansard, Arthaud, Cohen, Viars], A259
supply-dependent, mixed venous oxyhemoglobin saturation and, during isovolemic hemodilution in pigs [Rasanen], A260
systemic oxygen uptake dependency on oxygen delivery with dobutamine and enoximone administration not explained by skeletal muscle metabolism [Francois, Mebazaa, Mateo, Lucas, Payen], A257
uptake, hemodynamics and, below and above occlusion of thoracic aorta in dogs: effects of dexmedetomidine [Gelman, Gregoretti, Henderson, Parks], A575
delivery systems
non-linear closed-loop controller for oxygenation based on clinically proven fifth dimensional quality surface [East, Tolle, McJames, Farrell, Brunner], A468
peritoneum as another route of, to blood [Siriwardhana, Newfield, Lipton, Giesecke], A226
prolonged apneic oxygenation, changes in systemic and pulmonary hemodynamics and acid-base balance during [Ikdea, Schweiss], A1117
measurement
anesthesia, not paralysis, increases mixed venous $\mathrm{O}_{2}$ [ColonnaRomano, Horrow, Baker], A162
monitoring
continuous, of hepatic venous saturation, predicts postoperative liver dysfunction [Nakashima, Kainuma, Sakuma, Kawase, Shimada], A414
continuous measurement of oxygen supply and oxygen con sumption, first data on new monitoring concept [Specht, Wichmann, Apenburg, Johnson, Reinhart], A456
estimation of $\mathrm{O}_{2}$ deficit and debt resulting from abdominal aortic crossclamping in humans [Perkins, Roberts, Shah, Feustel, Cohen], Al13
by indirect calorimetry during continuous breathing circuit flow [Rasanen], A410
pulse oximetry, does skin pigmentation affect accuracy of? In Vitro study [Volgyesi, Peng, Spahr-Schopfer], A406
pulse oximetry failure, digital block for [Grayson, Bourke], A.407
simultaneous in-vivo comparison of 2 - versus 3 -wavelength mixed venous oximetry catheters [Leighton, Liu, Lee, Klein, Bongard], A408
telemetric pulse oximetry network, effects of default alarm limit settings on alarm distribution in, in ward setting [Pan, James], A405
venous oxygen saturation: central venous or pulmonary artery catheter? [Auffray, Martin, Prima, Papazian, Gouin], A455
In Vitro calibration of continuous mixed venous oxygen saturation pulmonary artery catheter during cardiac surgery, accuracy of [Stensrud, Van Beck, de Castro, Sharp, Abenstein], A464
tension
high and low, mechanism of inhibition of EDRF synthase activity by [Johns, Rengasamy], A538
is supplemental $\mathrm{O}_{2}$ beneficial to premedicated patients prior to CABG surgery? [Kavanagh, Cheng, Sandler, Lawson, Chung], A104
tissue
improvement of, by pentoxifylline in patients with septic shock [Steltzer, Mayer, Weinstabl, Oismuller, Hammerle], A231
total and splanchnic $\mathrm{O}_{2}$ deliveries, discrepancy between, during dobutamine, dopamine, and norepinephrine [Noldge, Priebe, Armbruster, Muller, Haberstroh, Geiger], A556
toxicity
acute amiodarone pulmonary, after general anesthesia [Duke, Ramsay, Herndon, Swygert, Cook], A228
transport
to blood, peritoneum as another route of [Siriwardhana, Newfield, Lipton, Giesecke], A226
Oxygen consumption. See under Brain; Liver; Metabolism
Oxygenation. See under Brain

## $\mathbf{P}$

## Pacemaker. See under Equipment

Pain
algesimeter
concurrent validation of objective pain scale for infants and children [Norden, Hannallah, Getson, O'Donnell, Kelliher, Walker], A934
antinociceptive effect of spinally administered $\alpha 2$ agonists, pharmacology of [Takano, Yaksh], A630
antinociceptive effects of intrathecal 3a-hydroxy-5a-pregnan-20one in rat mechanical visceral pain model [Colburn, Winfree, Coombs, Deleo, Twitchell], A594
cancer, control of, trial of therex implantable pump delivered intrathecal MS in [Coombs, Saunders, Maurer, Vernier, Ahles], A741
chronic
back, intractable, treatment of, with injection of $10 \%$ butamben suspension [Shulman, Ivankovich, Braverman, Lubenow], A739
intrapatellar nerve block for, following diagnostic knee arthroscopy [Trankina], A738
is postthoracotomy pain syndrome affected by postoperative pain relieving technique? [Miguel, Hubbell], A763
long-term methadone therapy for [Wan Lu, Urban, France], A719
effects of topical colchicine and spinal capsaicin on thermal hyperesthesia in compression mononeuropathy model [Yamamoto, Yaksh], A599
induced by intradermal bradykinin, in humans [Manning, Raja, Meyuer, Campbell], A699
management of, special qualifications for anesthesiologist in [Korevaar, Arbittier], A764
measurement
concurrent validation of objective pain scale for infants and children [Norden, Hannallah, Getson, O'Donnell, Kelliher, Walker], A934
neuropathic, altered neuropeptide expression in rat model of [Marchand, Wurm, Kato, Kream], A592
pelvic, due to cancer, caudal steroids for treatment of [Maytorena, Sierra, Prihoda, Hoffman, Tingle], A727
postoperative
impact of vomiting and, postoperative mood assessment in surgical outpatients [Young, Kitz, Conahan, Aukburg, Lecky], A5
objective index of, in infants: EEG spectral activity [Meyer, Jayais, Bensouda, Mayer, Barrier], A1026
phantom sensation and pain in pediatric amputees, incidence of [Krane, Heller, Pomietto], A691
pulmonary dysfunction and, after cholecystectomy under laparoscopy and laparotomy [Cigarini, Joris, Jacquet, Lamy], A122
spinal and systemic antinociceptive actions of CP96345, nonpeptidic substance $P$ antagonist, in rat [Yamamoto, Yaksh], A593
Pancuronium. See under Neuromuscular relaxants
Papaverine. See under Pharmacology
Parasympathetic nervous system
airway reactivity and neuronal M2 muscarinic receptors [Okanlami, Hirshman, Fryer], A978
altered $\beta$-adrenergic cholinergic interaction in airways of basen-ji-greyhound dogs [Curry, Emala, Black, Hirshman], A976
autonomic nervous system function, continuous measurement of pupillary area fluctuations as marker of [Kimura, Komatsu, Shimada], A1003
does intrathecal clonidine release acetylcholine? [Tong, Eisenach, Shea, Bucklin, Limauro], A658
ganglia, synaptic transmission in, mechanism of action of local anesthetics on [Tabatabai, Booth], A600

## glycopyrrolate

pharmacokinetics of, in children [Kanto, Rautakorpi, AliMelkkila, Iisalo, Kaila], A353
nicotinic mechanism may underlie antiemetic properties of phenothiazines [Dodson, Braswell], A636

## receptors

nicotinic receptor ion channel, amobarbital and procaine have different effects on [Yost, Dodson], A1035
In Vivo block of muscarinic receptors with derivatives of tropacocaine [Gyermek, Wilde, Nguyen, Lee], A633
Pediatric anesthesia. See under Anesthesia
Pentobarbital. See under Anesthetics, intravenous; Hypnotics
Pentoxifylline. See under Pharmacology
Peridural catheters. See under Equipment, catheters
Peridural space. See under Anatomy
Personnel
anesthesia crisis resource management training [Gaba, Howard, Fish, Yang, Sarnquist], A1062

## anesthesiologists

is there relationship between controlled substance accountability and controlled substance abuse? [Klein, Stevens, Kingston], A881
nurse anesthetists
is there relationship between controlled substance accountability and controlled substance abuse? [Klein, Stevens, Kingston], A881
residents
is there relationship between controlled substance accountability and controlled substance abuse? [Klein, Stevens, Kingston], A881
pH. See under Acid-base equilibrium
Pharmacodynamics
aberrant drug responses, better differentiation of, permitted by identification of DNA mutations responsible for serum butyrylcholinesterase variants [La Du, Primo-Parmo, van der Spek], A372
of alfentanil, influence of Crohn's disease on [Gesink-van der Veer, Burm, Vletter], A327
influence of pharmacokinetic variability on pharmacologic response [Williams, Smith, Jacobs], A48
muscle relaxant effects in thumb, larynx, and diaphragm [Bragg, Fisher, Donati, Meistelman, Sheiner], A799
vecuronium parameters, influence of blood sampling schedule on [Ducharme, Varin, Theoret, Bevan, Donati], A803

## Pharmacokinetics

alfentanil, gastric fluid concentrations of, following infusion of [Prasloski, Parsons], A318
of alfentanil, influence of Crohn's disease on [Gesink-van der Veer, Burm, Vletter], A327
of alfentanil administered by multiple bolus and continuous infusion in presence of either nitrous oxide or propofol [Avram, Sanghvi, Henthorn, Fragen, Asada, Pemberton, Correll, Minieka], A320
comparison of G187084B, novel ultra-short acting opioid, and alfentanil [Hermann, Marton, Donn, Grosse, Hardman, Kamiyama, Glass], A379
computer-controlled propofol infusion: comparison of three models [Viviand, Guidon-Attali, Lacarelle, Borsarelli, Francois], A313
of dexmedetomidine, intrathecal, epidural, and intravenous [Bucklin, Eisenach, Tucker], A662
effects
of disease on protein binding [Stiller, Davis, Cook, McGowan], A963
of fentanyl, in congestive heart failure [Norgaard, Pineda, McGlinch, Zimmerman, Estrin], A325
of glycopyrrolate in children [Kanto, Rautakorpi, Ali-Melkkila, Iisalo, Kaila], A353
influence
of pharmacokinetic variability on pharmacologic response [Williams, Smith, Jacobs], A48
of interpleural bupivacaine in plasma and lung lymph [Suresh, Johnston, Traber, Traber, Arens], A756
of intranasal and intravenous midazolam in young children [Delaunay, Murat, Rey, Pons, Saint-Maurice], A923
of intranasal midazolam: influence of cimetidine [Servin, Laxenaire, Samain, Farinotti, Desmonts], A352
of intranasal phenylephrine in children, clinical effects of [Christensen, Armstead, Bilyu, Johnson, Friesen], A967
of IV dexmedetomidine in adults [Dyck, Maze, Shafer], A310
of ketamine, in children [Malinovsky, Servin, Lepage, Cozian, Pinaud], A351
of methylnaltrexone, new opiod antagonist [Foss, Roizen, Moss, Murphy], A360
midazolam infusion for conscious sedation following abdominal aortic surgery [Miller, Martineau, Dean, Vallee, LeBel], A271
of ORG 9426 in elderly surgical patients [Matteo, Ornstein, Schwartz, Stone, Ostapkovich, Spencer, Dee], A1065
of pipecuronium in infants, children, and adults [Tassonyi, Pittet, Schopfer, Gemperle, Rouge, Morel], A777
prediction, rate of infusion of propofol for constant concentration differs from [Crankshaw, Morgan, Dawson], A312
prediction
of plasma concentrations during alfentanil infusion in volunteers: accuracy of different models [Barvais, Cantraine, d'Hollander, Coussaert], A319
of propofol sedation [Monk, Ding, Smith, White], A314
of propofol versus age [Dyck, Varvel, Hung, Shafer], A315
of rocuronium, in humans: normal versus hepatic dysfunction [Magorian, Wood, Caldwell, Szenohradszky, Segredo, Sharma, Gruenke, Miller], A1069
of ropivacaine and bupivacaine in pregnant ewes [Wlody, Santos, Arthur, Pedersen, Morishima, Finster, Covino], A829
sufentanil versus fentanyl: comparison during and after infusion for neurosurgical anesthesia [Artru, Levron, Charlot, Le Moing, Chacornac], A324
thiopental dose requirement and distribution, altered by dexmedetomidine [Mappes, Buhrer, Lauder, Stanski; Maitre], A306
of transdermal fentanyl, aging and [Esteve, Levron, Flaisler, Schoefler, Duvaldestin, Chauvin], A705
of two isomers of mivacurium, in cat [Wray, Belmont, Maehr, Welch, Wastila], A305
vecuronium parameters, influence of blood sampling schedule on [Ducharme, Varin, Theoret, Bevan, Donati], A803
Pharmacology. See also under Sympathetic nervous system

## adenosine

hypotension induced by, cerebral blood flow during, in human [Lam], A173
inhibits oxygen free radical production of human polymorphonuclear leukocytes by action as calcium antagonist [Thiel, Bardenheuer], A1016
potentiation of, by pentoxifylline in inhibition of superoxide anion production of human polymorphonuclear leukocytes [Thiel, Becker, Bardenheuer], A230
albumin
negative inotropic effect of, assessment of [Journois, Safran, Dru], A164
almitrine
effect of, on pulmonary capillary transit times [Emhardt, Hanger, Hanson, Herve, Wagner], A134

## amiodarone

acute pulmonary toxicity, oxygen-induced, after general anesthesia [Duke, Ramsay, Herndon, Swygert, Cook], A228

## amrinone

in children after Fontan procedure for repair of complex cyanotic congenital heart disease, hemodynamic effects of [Sorensen, Lynn, Stevenson, French], A961
mechanism of action of, on airways [Lenox, Sauder, Grayson, Tobias, Hirshman], A977
phosphodiesterase inhibitors dilate human internal mammary artery In Vitro [Levy, Salmenpera, Meyer, Harrison], A1118
pulmonary vascular effects of, during acute and chronic pulmonary hypertension, in conscious dogs [Pribble, Nyhan, Nishiwaki, Rock, Peterson, Tong, Desai, Murray], A567
randomized blinded trial of epinephrine and, and amrinone/epinephrine after cardiopulmonary bypass [Royster, Butterworth, Prielipp, Robertie, Kon], A148

## angiotensin

competitive versus non-competitive antagonism of hypertension in chronically instrumented pregnant ewes [Hammerle, Krafft, Neumark, Poschl, Wagner], A826
aprotinin
high-dose, effects of: modification of hemostatic parameters during cardiopulmonary bypass [Gardaz, Hauert, Chassot, Parise, Bernath, Bachmann], A991
aspirin
desmopressin does not decrease bleeding after [Horrow, Van Riper, Parmet, Osborne], A985

## bradykinin

intradermal, induces pain and hyperalgesia in humans [Manning, Raja, Meyuer, Campbell], A699
calcitonin
effects of gene-related peptide, on skeletal muscle from patients evaluated for susceptibility to malignant hyperthermia [Fleming, Lewis, Willeford], A813
capsaicin
effect of, on endotracheal pressure changes and neuropeptides release from guinea-pig lung In Vitro [Hogman, Hua, Grafe, Yaksh], A631
cephapirin
coagulation induced by, assessment of duration of abnormalities as measured by thromboelastograph [Baeuerle; Mongan, Hoskin], A70
CP96345
spinal and systemic antinociceptive actions of, non-peptidic substance $P$ antagonist, in rat [Yamamoto, Yaksh], A593
cyclosporine
potentiation of neuromuscular blockade by, not mediated by pre or postsynaptic membrane effects [Sharpe, Gelb, Brown, Veitch, Henderson], A791
desmopressin
does not decrease bleeding after aspirin [Horrow, Van Riper, Parmet, Osborne], A985

## dobutamine

administration of, skeletal muscle metabolism does not explain systemic oxygen uptake dependency on oxygen delivery with [Francois, Mebazaa, Mateo, Lucas, Payen], A257
discrepancy between total and splanchnic $\mathrm{O}_{2}$ deliveries during, [Noldge, Priebe, Armbruster, Muller, Haberstroh, Geiger], A556
hemodynamic effects of, during septic shock treated by norepinephrine [Blanloeil, Lejus, Francois, Michel, Pinaud], A240
dopamine
discrepancy between total and splanchnic $\mathrm{O}_{2}$ deliveries during, [Noldge, Priebe, Armbruster, Muller, Haberstroh, Geiger], A556
enoximone
administration of, skeletal muscle metabolism does not explain systemic oxygen uptake dependency on oxygen delivery with [Francois, Mebazaa, Mateo, Lucas, Payen], A257

## epinephrine

norepinephrine versus, in septic shock [Francois, Blanloeil, Lejus, Michel, Pinaud], A241
fenoldopam
in management of postoperative hypertension, evaluation of [Goldberg, Cantillo, Munoz, Nemiroff, Subramoni, Torjman, Vekeman, Davis], A49
regional vascular reactivity to, in sheep, selective sepsis-induced changes in [Schiffer, Schwieger, Poinsot, Klohn, Mentha, Gaumann, Morel], A243

## G187084B

single escalating doses of, administered intravenously, analgesic efficacy of, in healthy adult male volunteers [Marton, Hardman, Kamiyama, Donn, Glass], A378

## histamine

effect of, on endotracheal pressure changes and neuropeptides release from guinea-pig lung In Vitro [Hogman, Hua, Grafe, Yaksh], A631
hydralazine
trimethaphan versus, on isolated rabbit myocardium [Lee, Virtusio, Liu], A138
ketanserine
hemodynamic response to intubation in healthy unpremedicated patients not decreased by [Schwieger, Forster, Tassonyi], A146
ketorolac
comparison of morphine and, when used during pediatric surgery [Watcha, Jones, Schweiger, Lagueruela, White], A942
does not decrease MAC of halothane or depress ventilation in rats [Rich, Schacterle, Moscicki, DiFazio, Adams], A769
effect of, on postoperative opioid requirement and recovery profile [Parker, Holtmann, White], A758
fentanyl analgesia versus, for outpatients undergoing operations with local anesthesia [Bosek], A762

## labetalol

acute metabolic acidosis in fetal lamb following maternal labetalol administration [Yeleswaram, Rurak, Hall, McMorland, Axelson], A1076
comparison of sodium nitroprusside and, in intracranial pressure, in cats [Thiagarajah, Lear, Azar, Talavera], A619
competitive versusnon-competitive antagonism of hypertension in chronically instrumented pregnant ewes [Hammerle, Kraff, Neumark, Poschl, Wagner], A826
response to treatment with, cocaine-induced hypertension and, in ewe [Hughes, Vertommen, Rosen, Messer, Espinoza, Parer, Shnider], A1075
latex
allergy, anaphylaxis on induction of anesthesia associated with [Setlock, Kelly], A1043

## L-dopa

influence of, on minimum effective dose of halothane in rat [Horn, Sastry, Franks], A333
methylparaben
effect of, on human cerebral blood flow [Gignac, Gelb, Manninen, Farrar, Lee], A196
metoclopramide
analgesic adjunct for labor-like pain [Rosenblatt, Saberski, Sinatra, Cioffi], A675
reduces pain of propofol injection [Ganta, Howard], A674
milrinone
phosphodiesterase inhibitors dilate human internal mammary artery In Vitro [Levy, Salmenpera, Meyer, Harrison], All18
MK-801
effects of, on cerebral regional oxygen consumption in focal cerebral ischemia, [Chi, Anwar, Sinha, Weiss], A609
nalbuphine
pruritus caused by continuous epidural bupivacaine-fentanyl ameliorated by, in postoperative patients [Newman, Dragisic, Lubenow, McCarthy, Ivankovich], A770
nedocromil
attenuates constriction in peripheral airways [Downey, Lindeman, Hirshman], A979
nicardipine
effects of, on hepatic blood flow after liver transplantation [Raucoules, Ichai, Drici, Goubaux, Gugenheim, Grimaud], A220
reduces toxicity from IV bupivacaine with epinephrine in rats [Kinney, Horn, Hyman, Skelley, Kinney], A766
reduction in vecuronium infusion dose requirements by, in humans [Sumikawa, Kawabata, Kamibayashi, Kita, Yoshiya], A793
nimodipine
reduces cardiorespiratory toxicity of intravenous bupivacaine, in rats [Hyman, Kinney, Horn, Skelley, Kambam], A677
nitroprusside
direct inotropic effects of, in isolated rabbit myocardium [Lee, Virtusio], A213
norepinephrine
discrepancy between total and splanchnic $\mathrm{O}_{2}$ deliveries during, [Noldge, Priebe, Armbruster, Muller, Haberstroh, Geiger], A556
epinephrine versus, in septic shock [Francois, Blanloeil, Lejus, Michel, Pinaud], A241
regional vascular reactivity to, in sheep, selective sepsis-induced changes in [Schiffer, Schwieger, Poinsot, Klohn, Mentha, Gaumann, Morel], A243
septic shock treated by, hemodynamic effects of dobutamine during [Blanloeil, Lejus, Francois, Michel, Pinaud], A240

## ondansetron

alfentanil-induced ventilatory depression not affected by [Dershwitz, Di Biase, Rosow, Wilson], A321
papaverine
phosphodiesterase inhibitors dilate human internal mammary artery In Vitro [Levy, Salmenpera, Meyer, Harrison], A1118
pentoxifyline
cardiorespiratory effects of, in septic and non-septic states [Mayer, Steltzer, Klimscha, Oismuller, Hammerle], A232
improvement of oxygen utilization by, in patients with septic shock [Steltzer, Mayer, Weinstabl, Oismuller, Hammerle], A231
In Vivo modulation of human neutrophil function by, in septic patients [Oismuller, Mayer, Steltzer, Michsche, Hammerle], A233
phentolamine
direct inotropic effects of, in isolated rabbit myocardium [Lee, Virtusio], A213
phenylephrine
competitive versusnon-compctitive antagonism of hypertension in chronically instrumented pregnant ewes [Hammerle, Kraff, Neumark, Poschl, Wagner], A826
phenytoin
chronic, decreased sensitivity to metocurine during, may be due to protein binding and receptor changes [Martyn, Kim], A640
potassium
effect of, on endotracheal pressure changes and neuropeptides release from guinea-pig lung In Vitro [Hogman, Hua, Grafe, Yaksh], A631
propylparaben
effect of, on human cerebral blood flow [Gignac, Gelb, Manninen, Farrar, Lee], A196
salbutamol
high dose salbutamol aerosol, effects of, on lung histology in rabbits [Spahr-Schopfer, Lerman, Cutz, PEng], A980
sodium nitroprusside
comparison of labetalol and, in intracranial pressure, in cats [Thiagarajah, Lear, Azar, Talavera], A619
theophylline
for post-dural puncture headache [Schwalbe, Schiffmiller, Marx], Al082
trimethaphan
hydralazine versus, on isolated rabbit myocardium [Lee, Virtusio, Liu], A138
verapamil
effects of, on local anesthetic blockade [Cohn, Laurito], A688
Phenothiazines. See under Ataractics
Phentolamine. See under Pharmacology
Phenylephrine. See under Pharmacology; Sympathetic nervous system
Phenytoin. See under Pharmacology

## Pipecuronium. See under Neuromuscular relaxants

## Placenta

placental transfer and neonatal effects of epidural fentanylbupivacaine for cesarean section [Bang, Helbo-Hansen, Lindholm, Klitgaard], A847
placental transfer of lidocaine during maternal hypoxia [Waters, Ramanathan], A828

## Plasma. See under Blood

Platelets: See under Blood

## Polypeptides

angiotensin
converting enzyme inhibitor, pulsed iontrophoretic delivery of [Zakzewski, Amory, Li, Jasaitis], A371
converting enzyme inhibitors, increased risk of prebypass myocardial ischemia in CABG patients when treated with [Schlumberger, Ceddaha, Raffin, Dubois, Fischler], A98
is tourniquet hypertension blocked by angiotensin-converting enzyme inhibition? [Heropoulos, Schieren, Seltzer, Bartkowski, Torjman, Lessin, Moody], A158

## atrial natriuretic

secretion of, effect of fentanyl on, in neonatal rat cardiomyocytes [Mekhail, Doss, Estafanous, Khairallah], A328
endorphins
$\beta$-endorphin and ACTH, post-translational processing of, in human pituitary [Bernard, Chronwall, Millington], A700
opioid peptides in human peripheral nerves [Brooks, Rattan, Gupta, Tejwani], A591
enkephalins
opioid peptides in human peripheral nerves [Brooks, Rattan, Gupta, Tejwani], A591
perioperative changes in IL-6 with cardiac transplantation [Sakai, Latson, Whitten, Elmore, Krishnan, Ring, Lipton, Giesecke], A107
renin-angiotensin
effects of pneumatic tourniquet on circulatory variables, plasma catecholamines and renin activity [Fahmy], A251

## Position

effects, cardiovascular
of Trendelenburg position and valsalva maneuver, on cross-sectional area of internal jugular vein [van de Griendt, Muhiudeen, Cassorla, Adler, Cahalan], A423
sitting versus lying, patient, tension applied to lumbar epidural catheters during removal is much greater with [Blackshear, Gravenstein, Radson], A833

## Trendelenburg

valsalva maneuver and, effect of, on cross-sectional area of internal jugular vein [van de Griendt, Muhiudeen, Cassorla, Adier, Cahalan], A423
Positive end expiratory pressure. See under Lung
Postoperative analgesia. See under Analgesia
Postoperative pain. See under Pain
Potassium. See under Ions; Pharmacology
Potency, anesthetic
MAC
deep extubation, using isoflurane, minimum alveolar concentration for [Neelakanta, Miller, Anderson], A331
of halothane, not decreased by ketorolac, in rats [Rich, Schacterle, Moscicki, DiFazio, Adams], A769
of halothane in humans, effect of ethanol on [Slee, Cullen, Unadkat, Pavlin], A332
reduction of isoflurane by fentanyl [McEwan, Smith, Dyar, Goodman, Glass], A43
Pregnancy
amniotic fluid removal from human blood through cell saver processing, In Vitro assessment of [Thornhill, O'Leary, Lussos, Rutherford, Johnson], A830
pharmacodynamics of cocaine altered by, in rats [Morishima, Cooper, Masaoka, Miller], A827
pharmacokinetics of ropivacaine and bupivacaine in pregnant ewes [Wlody, Santos, Arthur, Pedersen, Morishima, Finster, Covino], A829
substance $P$ levels are decreased in [Mouton, Kambam, Naukum, Blanks, Rama Sastry], A842
Premedication
effects of inhalational induction with desflurane, on anesthetic requirement, speed of induction and airway activity [Kelly, Hartman, Embree, Sharp, Artusio], A9
oral midazolam, safety of, for use in children [Spahr-Schopfer, McMillan, Sikich, Hartley, Lerman], A921
oral midazolam premedication in pediatric day surgery, efficacy and feasibility of [McMillan, Spahr-Schopfer, Sikich, Hartley], A27
prior to CABG surgery, supplemental $\mathrm{O}_{2}$ and [Kavanagh, Cheng, Sandler, Lawson, Chung], A104
transmucosal midazolam for, in pediatric patients: comparison of intranasal and sublingual routes [Karl, Larach, Ruffle], A922
Pressure monitoring. See under Monitoring
Procaine. See under Anesthetics, local
Proparacaine. See under Anesthetics, local
Propofol. See under Anesthetics, intravenous
Propylparaben. See under Pharmacology
Prostaglandins. See under Hormones
Protamine. See under Blood
Protein. See under Metabolism
Pulmonary arterial catheters. See under Equipment, catheters
Pulmonary artery. See under Lung
Pulmonary infection. See under Infection
Pulse monitor: See under Equipment; Measurement techniques
Pulse rate. See under Heart
Pupil. See under Eye
Purkinje fibers. See under Heart

## R

Radial arteries. See under Arteries
Radiation exposure. See under Complications

## Ranitidine. See under Histamine

Receptors. See also under Parasympathetic nervous system adrenergic
alteration of alpha and beta receptor binding: possible mechanism for halothane-epinephrine sensitization [Skupski, Miletich, Minshall, Albrecht], A159
$\beta$-adrenergic receptor desensitization during cardiopulmonary bypass [ Schwinn, Leone, Chestnut, Spahn, Page, Liggett], Al119
diethyl ether enhances GABA-gated chloride flux by allosteric mechanism [Quinlan, Firestone], A1034
dopamine-2 receptor $m$ RNA, cellular localization of, in rat trigeminal ganglion [Peterfreund, Kosofsky, Fink], A596
etomidate modulation of central GABAA-receptor gated current [Yang], A578
GABAA, modulation of, by propofol: protein or lipid interaction? [Hales, Lambert], A587
GABA-mediated inhibitory postsynaptic currents at synapses between cultured rat hippocampal neurons prolonged by clinical concentration of three volatile anesthetics [Jones, Hornberger, Harrison], A580
is GABA-mediated synaptic transmission enhanced by propofol? [Yamamura, Ohtsuka, Furumido, Tsutahara, Kemmotsu], A588
scorpion venom that activates normal and inhibits malignant hyperthermia susceptible ryanodine receptors [Valdivia, Hayek, Hogan, Coronado], A643
three volatile anesthetics enhance GABA-activated chloride currents in cultured rat hippocampal neurons at clinically relevant concentrations [Harrison, Jones, Brooks], A1040
thromboxane blockade, effect of, following inhalation injury in sheep [Locik, Traber, Theissen, Flynn, Traber], A224

## Recovery

from ambulatory surgery, effect of ondansetron on recovery time, sedation level and discharge [Kovac, Steer, Hutchison, Calkins, Joslyn], A7
from atracurium-induced paralysis, enhanced by succinylcholine [Huang, Simpson], A783
effect of intraoperative ketoralac on, after outpatient laparoscopy [DeLucia, White], A14
energy expenditure, relation between intraoperative heat balance and [Just, Delva, Camus, Lienhart], A261
ketorolac superior to sufentanil, giving longer pain relief with less nausea and less recovery time after laparoscopy [Bellamy, Chovan, Brose, Gunzenhauser], A29
from neuromuscular blockade, pre- and postsynaptic effects of ORG 9426 during onset of and [Watanabe, Chen, Ohta, Nagashima, Foldes], A798
PADS-A discriminative discharge index for ambulatory surgery [Chung, Ong, Seyone, Mati, Chan], A1105
postoperative T-wave abnormalities in recovery room, incidence and outcome of patients with: retrospective analysis [Chhangani, Nedumogotil, Kartha], A1014
regulation

- thermal manipulations, appropriate, eliminate post-anesthetic tremors in rats [Grahn, Heller, Heller], A279


## temperature

thermal manipulations, appropriate, eliminate post-anesthetic tremors in rats [Grahn, Heller, Heller], A279
use of pulse oximetry as predictor of post-anesthesia care unit duration in smokers and nonsmokers [Handlin, Baker], A903
Reflexes
autonomic, caused by propofol, surgical stimulation significantly reduces depression of [Latson, Wiley, O'Flaherty], A85
baroreceptor
control of heart rate during high thoracic epidural anesthesia [Goertz, Seeling, Heinrich], A87
effect of isoflurane on, in rabbit [Wilson, Bell, Quandt, Kampine], A1120
heart rate responses to pharmacological-induced ramp increases and decreases in arterial pressure in awake human volunteers [Duke, Morton, Ong, Hill], A568
mesenteric
venoconstriction, differential effect of inhaled isoflurane on, in normotensive and chronically hypertensive rabbit [Stekiel, Tominaga, Bell, Bosnjak, Kampine], A571
swallowing, depression of, two hours after midazolam [Lambert, D'Honneur, Abhay, Gail, Duvaldestin], A891
swallowing, effect of pharyngo-laryngeal topical lidocaine on [Dalibon, Dureuil, Montravers, Ducros, Desmonts], Al25
Regional anesthesia. See under Anesthetic techniques
Renin-angiotensin. See under Polypeptides
Research
abstracts presented at anesthesia meetings: here today and gone tomorrow? [Campbell, Yentis, Lerman], A886
Resident education. See under Education
Residents. See under Personnel
Respiratory distress syndrome. See under Lung

## Respiratory quotient. See under Metabolism

Respiratory resistance. See under Lung
Resuscitation. See under Heart
Rocuronium. See under Neuromuscular relaxants
Ropivacaine. See under Anesthetics, local
S

## Salbutamol. See under Pharmacology

## Scheduling. See under Anesthesia

Septic shock. See under Shock
Septicemia. See under Infection

## Serotonin

release in spinal cord, similar actions of clonidine and fentanyl and norepinephrine on [Maytorena, Gandhi, Jones], A601
release of 5-hydroxytryptamine and thromboxane A2 from human platelets, inhibited by halothane and isoflurane, in humans [Blaise, Buluran], A520
Sevoflurane. See under Anesthetics, volatile
Shivering. See under Complications
Shock
hemorrhagic, veno-arterial gradients for $\mathrm{PcO}_{2}$ and $p \mathrm{H}$ reflect tissue hypoxia during, in dogs [Vanderlinden, Gilbart, Pa ques, Bakker, Vincent], A236
septic
dextran 60 or fluid gelatin for fluid expansion in [Auffray, Papazian, Perrin, Saux, Martin], A242
norepinephrine versus epinephrine in [Francois, Blanloeil, Lejus, Michel, Pinaud], A241
relationship between oxygen delivery and mixed venous oxygen saturation during [Levraut, Jambou, Kaidomar, Grimaud], A234
treated by norepinephrine, hemodynamic effects of dobutamine during [Blanloeil, Lejus, Francois, Michel, Pinaud], A240
Shunting. See under Lung
Skin
blood flow
reduction of transcutaneous oxygen and, by hyperventilation, in extremities [Barker, Hyatt, Clarke], A409

## temperature

warmed, effect of, on heat gain: skin surface warming during surgery [Delva, Camus, Just, Ollivier, Lienhart], A490
Sodium. See under Ions
Sodium nitroprusside. See under Anesthetic techniques, hypotensive; Pharmacology
Spasm. See under Larynx
Spectroscopy. See under Measurement techniques
Spinal anesthesia. See under Anesthetic techniques
Spinal cord
$\alpha$-adrenoceptors in, preliminary characterization of, by autoradiography, in sheep [Bucklin, Eisenach, Rooze], A664
antinociceptive actions of GABAA agonists in, effect of pentobarbital or diazepam on, in rat [Howard, Hammond], A579
dorsal horn ganglia
isoflurane modulates calcium channel current in [Heath, Berman], A1037
effects of topical colchicine and spinal capsaicin on thermal hyperesthesia in compression mononeuropathy model [Yamamoṭo, Yaksh], A599
effects of volatile general anesthetics and alcohols on spinal cord protein kinase [Austin, Firestone], A1041
evoked potentials, for innocuous and noxious electrical stimuli, component-specific and naloxone reversible effects of fentanyl on, in rabbit [Lee], A652
nociceptive neurotransmission in, depression of: propofol and barbiturates [Jewett, Tarasiuk, Gibbs, Kendig], A589
progesterone-mediated potentiation of spinal opiates [Carp, Jayaram], A838
sciatic nerve ligation increases mRNA coding for substance $P$ and dynorphin in, in rat [Carpenter, Nepom, Yaksh, Yamamoto], A1089
sensory processing, what role do alpha-adrenergic systems play in tonic modulation of? [Kishikawa, Collins, Uchida], A645
serotonin release in, similar actions of clonidine and fentanyl and norepinephrine on [Maytorena, Gandhi, Jones], A601
spinal and systemic antinociceptive actions of CP96345, nonpeptidic substance $P$ antagonist, in rat [Yamamoto, Yaksh], A593
spinally administered $\alpha 2$ agonists, pharmacology of antinociceptive effect of [Takano, Yaksh], A630
Statistics
comparison of artificial neural networks and classical statistical analysis [Watt, Samuelson, Navabi], A451
statistical artifact, neuropsychological change and [Mitzel, Albin, Costello], A1030
Stomach. See under Gastrointestinal tract

## Stored blood. See under Blood

Subclavian vein. See under Veins
Succinylcholine. See under Neuromuscular relaxants
Sufentanil. See under Analgesics; Anesthetics, intravenous

## Surgery

cardiovascular
cardiac surgical patients plasma enhances oxygen free radical production in neutrophils [Nakamura, Bonventre, Inada, deBros, Shibata, Kono, Philbin], A95
cardiopulmonary bypass, elimination of metocurine by hemofiltration in [Hogue, Itani, Martyn], A801
cardiopulmonary bypass, isoflurane elimination from membrane oxygenator during [Eckenbrecht, Griffin, Quinn], A367
cardiopulmonary bypass, management of anti-coagulation during [Urban, Gordon, Farrell, Shaffer], A437
cardiopulmonary bypass, predicting bleeding in, sensitivity and specificity of APTT and PT by portable laser photometer in [Nuttall, Oliver, Beynen, Nichols], A431
cardiopulmonary bypass, thromboelastographic fibrinolysis does not correlate with levels of D -dimers after [Whitten, Allison, Latson, Elmore, Gulden, Burkhardt, Hyndman], A432
cardiopulmonary bypass, ventilation, thermal noise, and errors in cardiac outputs after [Latson, Whitten, Elmore, Wiley, O'Flaherty], A478
comparison of ACT and TEG in patients receiving autologous platelet-rich-plasma during [Wong, Jones, Wade], A434
desensitization of beta-adrenergic receptor system caused by [Smiley], A559
emergency coronary artery bypass: identification of high-risk subsets [Tuman, McCarthy, Corey, Ivankovich], A101
hypothermic cardiopulmonary bypass, rewarming injury impairs cerebral blood flow after [Johnston, Vinten-Johansen, DeWitt, Stump, Prough], A543
ICU sedation following: propofol versus midazolam [Higgins, Yared, Estafanous, Coyle, Vassel, Goodale], A278
post-bypass bleeding, prevention of, with cyklokapron and amicar [Karski, Teasdale, Carroll, Glynn], A275
risk factors for respiratory complications after [Higgins, Yared, Paranandi, Baldyga, Starr], A258
simplified risk scoring system for patients undergoing [McCarthy, Tuman, Corey, Ivankovich], A114
carotid endarterectomy
anesthesia for,: propofol versus etomidate-isoflurane [Paillot, Van Hemelrijck, Van Aken], A180
four channel density spectral array does not reliably detect mild cerebral ischemia during [Kearse, Martin, McPeck], A1028
narcotic anesthesia during, prevalence of epileptiform activity of [Kearse, McPeck], A1029
perioperative myocardial ischemia in [Landesberg, Eidelman, Erel, Anner, Assaf, Halimi, Luira, Gotsman, Berlatzky, Cotev], A94
thoracic
lumbar epidural fentanyl reduces pain following, pre-incisional versus post-incisional: randomized double-blind crossover study [Kavanagh, Katz, Sandler, Nierenberg, Panos], A1087
transplantation
kidney, evaluation of proconvulsant effect of laudanosine in recipient [Lepage, Athouel, Vecherini, Malinovsky, Cozian], A781
kidney, hemodynamic effects of OKT3 during [Robinson], A139
liver, changes in IL-6 during [Sakai, Whitten, Roberts, Latson, Krishnan, Lipton, Ramsay, Giesecke], A624
liver, comparative evolution of renal hemodynamics during, with and without veno-venous bypass [Veroli, Elhage, Gillon, Descorps-Declere, Jayais, Ecoffey], A219
liver, effect of aprotinin on fibrinolysis during [Tartiere, Deshayes, Samba, Le Querrec, Gerard], A218
liver, effects of nicardipine hydrochloride on hepatic blood flow after [Raucoules, Ichai, Drici, Goubaux, Gugenheim, Grimaud], A220
liver, glucose/insulin decreases potassium level in anhepatic patients [Frenette, De Wolf, Kang, Tang], A217
liver, graft function after, value of total body oxygen consumption as parameter of [Groh, Gerhard, Forst, Welte, Dieterich, Pratschke, Peter], A479
liver, hormonal influences on renal function during [Roberts, Sakai, Duke, Ramsay, Whitten], A622
liver, implications for coagulopathy during: hepatic regulation of fibrinolysis [Kelley, Bissell], A565
liver, on-line assessment of liver graft function by recording neuromuscular transmission during liver transplantation in pigs [Pittet, Mentha, Schopfer, Morel, Benakis, Tassonyi], A815
liver, plasma laudanosine levels in patients receiving continuous atracurium infusions during [Peters, Matsumi, Lawhead, Landers, Becker, Earl], A303
liver, rapid increase in sodium associated with CPM after [Videira, Kang, Martinez, DeWolf, Aggarwal, Gasior], A222
liver, reperfusion during, metabolic and ECG changes associated with [Gabrielson, Nam, Reich], A990
liver, reperfusion syndrome during: echocardiographic analysis of ventricular dynamics [Gabriel, Muller, Tuchy, Hackl, Zimpfer], A992
liver, solution for hemodynamic instability that minimizes blood transfusion requirement in [Lin, Lichtor, Emond, Broelsch], A988
liver, transesophageal echocardiography during [Roberts, Duke, Gottlich, Ramsay], A388
liver, with post-reperfusion syndrome, myocardial depressent effect of plasma from: In Vitro study [Jayais, Chemla, Ecoffey, Descorps-Declere, Samii, Lecarpentier], A554
subarachnoid adrenal medullary [Winnie, Krolick, Sagen, Pappas, Wang], A695
vascular
abdominal aortic crossclamping in humans, estimation of $\mathrm{O}_{2}$ deficit and debt resulting from [Perkins, Roberts, Shah, Feustel, Cohen], A113
abdominal aortic surgery, midazolam infusion for conscious sedation following [Miller, Martineau, Dean, Vallee, LeBel], A271
aortic, under balanced anesthesia, anesthetic drug requirements and hemodynamic response during, not influenced by clonidine [Favre, Gardaz, Nussberger, Chiolero], A151
aortic occlusion, neurogenic motor evoked potentials are predictive of neurologic function in porcine model of [Mongan, Peterson], Al123
aortic unclamping, metabolic monitoring of early repayment phase following, comparison of patients with abdominal aortic aneurysm and vascular occlusive disease [Roberts, Cohen, Perkins, Robbiano, Shah], A149
assessment of cardiac risk before abdominal aortic surgery: unreliability of both dipyridamole thallium scintigraphy and gated radionuclide angiography [Baron, Mundler, Bertrand, Vicaut, Coriat, Kieffer, Viars], A100
effect of fluid loading on right ventricular function and hemodynamic state with aortic unclamping during abdominal surgery [Nakatsuka, Posner, Thomas], A105
hemodynamics and oxygen uptake below and above occlusion of thoracic aorta in dogs: effects of dexmedetomidine [Gelman, Gregoretti, Henderson, Parks], A575
major, natural anti-coagulant levels following [Gibbs, Crawford, Michalopoulus], A72
Sympathetic nervous system
activity of, effect of atracurium on [Yoneda, Nishizawa, Benson, Goto, Arakawa], A780
alpha-adrenergic agonists
clonidine, added to mepivacaine for brachial plexus blockade: minimal effective dose prolonging duration of both anesthesia and analgesia [Bartholomee, Singelyn, Broka, Gouverneur], A1084
clonidine, adding fentanyl and, to mepivacaine, results in rapid onset and prolonged anesthesia and analgesia after brachial plexus blockade [Singelyn, Muller, Gouverneur], A653
clonidine, anesthetic drug requirements and hemodynamic response during aortic surgery under balanced anesthesia not influenced by [Favre, Gardaz, Nussberger, Chiolero], A151
clonidine, combining low dose morphine and, prevents bladder size increase: cystographic study in rabbits [Wang, Li , Hiller], A634
clonidine, comparative effects of ketanserine and, on postoperative shivering [Banache, Joris, Lamy], A51
clonidine, comparison of bupivacaine and, for postoperative analgesia [Carabine, Milligan, Moore], A1083
clonidine, comparison of guanfacine and, in regard to duration of antinociception, and ventilatory and hemodynamic effects [Smith, Baudendistel, Gibbons, Schweiss], A655
clonidine, differences in attenuation of $\alpha 1$ and $\alpha 2$ adrenocep-tor-mediated pressor responses by halothane and isoflurane in dogs [Tsuchida, Sato, Namiki], A551
clonidine, does not prevent myocardial ischemia during noncardiac surgery [Lipazyc, Engelman], A93
clonidine, does not reduce postoperative meperidine requirements [Striebel, Gottschalk, Kramer], A659
clonidine, effect of, on ventilation and ventilatory depression produced by alfentanil in volunteers [Jarvis, Duncan, Segal, Maze], A982
clonidine, effects of, on C-fiber action potential, interaction with lidocaine [Gaumann, Brunet, Jirounek, Morel, Volet], A656
clonidine, effects of urapidil and, on left ventricular performance [Lepage, Pinaud, Malinovsky, Cozian, Souiron], A137
clonidine, epidural, following cesarean section: effect of prior local anesthetic [Huntoon, Eisenach, Boese], A855
clonidine, epidural, for refractory reflex sympathetic dystrophy [Rauck, Eisenach, Jackson, Speight, Southern], A657
clonidine, epidural, reduces epidural fentanyl requirements and side effects in postoperative patients [Delaunay, Leppert, Dechaubry, Baubillier, Bonnet], A1086
clonidine, intraoperative, enhances postoperative morphine patient controlled analgesia [Dekock, Pichon, Scholtes], A654
clonidine, intrathecal, is acetylcholine released by? [Tong, Eisenach, Shea, Bucklin, Limauro], A658
clonidine, IV equally effective as morphine IV for postoperative analgesia: double-blind study [Tryba, Zenz, Strumpf], A1085
clonidine, morphine and, contrasting action of intrathecal Kappa agonist ( $\mathbf{U} 50-488 \mathrm{H}$ ) in visceral pain processing as compared to [Harada, Nishioka, Kitahata, Collins], A663
clonidine, preoperative oral, reduced anesthetic requirement for CABG surgery and [Howie, Hiestand, Romanelli, Harris, Rezaei, McSweeney], A41
clonidine, prevents postoperative increase in $\mathrm{VO}_{2}$ [Delaunay, Bonnet, Liu, Duvaldestin], A981
clonidine, reduction of catecholamine response to CABG surgery by [Hiestand, Howie, Romanelli, Jopling, Rezaei, McSweeney], A153
clonidine, significant synergism between intrathecal morphine and, for visceral antinociception [Harada, Nishioka, Kitahata, Collins], A660
clonidine, similar actions of fentanyl and norepinephrine and, on serotonin release in spinal cord [Maytorena, Gandhi, Jones], A601
clonidine, spinally administered, agonist and antagonist pharmacology of antinociceptive effect of [Takano, Yaksh], A630
clonidine, systemic effects of bupivacaine and, [Carabine, Milligan, Moore], A661
dexmedetomidine, alteration of thiopental dose requirement and distribution pharmacokinetics by [Mappes, Buhrer, Lauder, Stanski, Maitre], A306
dexmedetomidine, continuous IV infusion of, as anesthetic adjuvant in hysterectomy [Aho, Erkola, Kallio, Scheinin, Korttila], A308
dexmedetomidine, effect of, on cerebrovascular response to hypoxia during isoflurane anesthesia [McPherson, Traystman], A174
dexmedetomidine, effects of, on hemodynamics and oxygen uptake below and above occlusion of thoracic aorta in dogs [Gelman, Gregoretti, Henderson, Parks], A575
dexmedetomidine, effects of, on vecuronium-induced twitch depression, in rat model [Henry, Weinger, Partridge], A794
dexmedetomidine, interaction of intravenous anesthetic agents and, in chronically instrumented dogs [Proctor, Schmeling, Kampine, Warltier], A558
dexmedetomidine, intrathecal, epidural, and intravenous, pharmacokinetic and dynamic studies of [Bucklin, Eisenach, Tucker], A662
dexmedetomidine, IV, pharmacokinets of, in adults [Dyck, Maze, Shafer], A310
dexmedetomidine, mediating role of $\alpha 2$ adrenoceptors in locus ceruleus for hypnotic response to, in rats [CorreaSales, Rabin, Maze], A635
dexmedetomidine, outcome from incomplete cerebral ischemia improved by, in rat [Hoffman, Kochs, Werner, Albrecht], A608
dexmedetomidine, spinally administered, agonist and antagonist pharmacology of antinociceptive effect of [Takano, Yaksh], A630
dexmedetomidine, synergistic interaction between $\alpha 2$ adrenergic agonists and benzodiazepines in rats [Salonen, Reid, Maze], Al125
dexmedetomidine and fentanyl, anesthetic and hemodynamic interactions of, in dogs [Salmenpera, Szlam, Hug], A307
dexmedetomidine effects on human drug biotransformation, ketamine metabolism as probe for, [Kharasch], A311
dexmedetomidine reduces intraocular pressure, intubation responses and anesthetic requirements in ophthalmic surgery [Ali-Melkkila, Jaakola, Kanto, Scheinin, Kallio], A309
guanfacine, comparison of clonidine and, in regard to duration of antinociception, and ventilatory and hemodynamic effects [Smith, Baudendistel, Gibbons, Schweiss], A655
medetomidine, sedative and hemodynamic effects of, in chronically instrumented Yucatan mini swine [Bloor, Kim, Vainio], A577
norepinephrine, similar actions of clonidine and fentanyl and, on serotonin release in spinal cord [Maytorena, Gandhi, Jones], A601
phenylephrine, differences in attenuation of $\alpha 1$ and $\alpha 2$ adrenoceptor-mediated pressor responses by halothane and isoflurane in dogs [Tsuchida, Sato, Namiki], A551
phenylephrine, intranasal, in children, clinical effects of pharmacokinetics of [Christensen, Armstead, Bilyu, Johnson, Friesen], A967
phenylephrine, magnesium depresses gravid ewe carotid and uterine artery dose response to, In Vitro [Bollen, Chestnut, Liu, Weiner], A820
phenylephrine-induced bradycardia does not correlate with changes in heart-rate variability [Jaffe, Fung, Behrman], A444
UK-14304, sedative and hemodynamic effects of, in chronically instrumented Yucatan mini swine [Bloor, Kim, Vainio], A577
alpha-adrenergic receptors
$\alpha 1$ Cadrenergic receptor subtype couples to phospholipase C [Schwinn, Page, Cotecchia, Caron, Lefkowitz], A629
$\alpha 2$-adrenoceptors, preliminary characterization of, by autoradiography, in sheep [Bucklin, Eisenach, Rooze], A664
$\alpha$-adrenoceptor subtype, role of, during mesenteric venoconstriction in response to celiac ganglion stimulation [Tominaga, Stekiel, Bosnjak, Kampine], A570
role of, in tonic modulation of spinal sensory processing [Kishikawa, Collins, Uchida], A645
assessment of, during anesthesia, new approach to [Deegan, He, Wood, Wood], A560
autonomic nervous system function, continuous measurement of pupillary area fluctuations as marker of [Kimura, Komatsu, Shimada], A1003
beta-adrenergic agonists
open-state probability of voltage-dependent calcium channels in airway smooth muscle decreased by [Tomasic, Boyle, Kotlikoff], A584
beta-adrenergic antagonists
esmolol, comparison of fentanyl and, as anesthetic adjuncts during rapid sequence induction [Chung, Sinatra, Halevy, Paige, Silverman], A155
esmolol, determining effectiveness of, to protect against ischemia, use of myocardial tissue impedance in [Howie, Romaneli, Hiestand, Liu, Rezaei, McSweeney], A443
esmolol blunts tachycardia due to topical cocaine and lidocaine with epinephrine infiltrations [Czinn, Rock, Friedman, Crystal, Salem], A34

## beta-adrenergic receptors

$\beta$-adrenergic receptor desensitization during cardiopulmonary bypass [Schwinn, Leone, Chestnut, Spahn, Page, Liggett], All19
altered $\beta$-adrenergic cholinergic interaction in airways of basen-ji-greyhound dogs [Curry, Emala, Black, Hirshman], A976
density of, in different human heart diseases and relationship to degree of heart failure [Steinfath, Lavicky, Schmitz, Scholz], A163
desensitization of, caused by cardiac surgery [Smiley], A559

## blockade

CT-guided thoracic sympathetic neurolysis [Jackson, Rauck], A721
celiac plexus
neurolytic block, is diagnostic block necessary prior to? [Jain, Chiang, Vanderslice], A749
neurolytic block of, new approach to: transintervertebral disc technique [Ina, Kobayashi, Narita, Taneyama, Kiyono], A718
dystrophy
reflex sympathetic, in children: follow-up of 70 patients [Wilder, Berde, Wolohan, Micheli, Vieyra], A693
reflex sympathetic, intravenous regional bretylium for treatment of [Hord, Rocks, Stephens, Fleming], A734
refractory reflex sympathetic, epidural clonidine for [Rauck, Eisenach, Jackson, Speight, Sóuthern], A657

## epinephrine

modifying stress response during total intravenous anesthesia [Monk, Ding, Smith, White], A42
ganglionic blockade
induced by methylnaltrexone, in dog [Foss, Orelind], A637
norepinephrine
modifying stress response during total intravenous anesthesia [Monk, Ding, Smith, White], A42
pharmacology
bretylium, intravenous regional, for treatment of reflex sympathetic dystrophy [Hord, Rocks, Stephens, Fleming], A734
dopamine, regional hemodynamic dose-responses to, compared to fenoldopam, in sedated sheep [Schwieger, Schiffer, Poinsot, Klohn, Mentha, Guamann, Morel], A563
dopamine infusion, or norepinephrine, during thoracic epidural anesthesia? differences in hemodynamic effects and plasma norepinephrine levels [Lundberg, Biber, Martner, Raner, Winso], A740
dopamine-2 receptor mRNA, cellular localization of, in rat trigeminal ganglion [Peterfreund, Kosofsky, Fink], A596
ephedrine, beneficial effect of, on uterine perfusion during pregnancy, vascular mechanism of [Tong, Eisenach], A825
ephedrine, which vasopressor should one give to treat hypotension during magnesium sulfate infusion and epidural anesthesia? [Chestnut, Vincent, Sipes, Debruyn, Bleuer, Chatterjee], A824
epinephrine, causes pulmonary hypertension but not edema in isolated pig lung [Toung, Reily, McPherson, Traystman], A1021
epinephrine, effect of, on alanine turnover and urea production rate in volunteers [Trager, Ensinger, Anhaupl, Georgieff, Rugheimer], A274
epinephrine, effects of pneumatic tourniquet on circulatory variables, plasma catecholamines and renin activity [Fahmy], A251
epinephrine, hormonal responses during hypotensive epidural anesthesia [Zayas, Sharrock, Blumefeld, McDonald, Sealy], Al12
epinephrine, pharmacokinetics and comparative efficacy of, during out-of-hospital CPR [Schuttler, Hornchen, Bremer], A287
epinephrine increases bupivacaine toxicity in rats [Kinney, Hyman, Horn], A681
fenoldopam, regional hemodynamic dose-responses to, compared to dopamine, in sedated sheep [Schwieger, Schiffer, Poinsot, Klohn, Mentha, Guamann, Morel], A563
norepinephrine, causes pulmonary hypertension but not edema in isolated pig lung [Toung, Reily, McPherson, Traystman], A1021
norepinephrine, effects of pneumatic tourniquet on circulatory variables, plasma catecholamines and renin activity [Fahmy], A251
norepinephrine, endogenous effect of, attenuated by volatile anesthetics, in isolated rabbit mesenteric veins [Stadnicka, Flynn, Bosnjak, Kampine], A572
norepinephrine, hormonal responses during hypotensive epidural anesthesia [Zayas, Sharrock, Blumefeld, McDonald, Sealy], Al12
norepinephrine infusion, or dopamine, during thoracic epidural anesthesia? differences in hemodynamic effects and plasma norepinephrine levels [Lundberg, Biber, Martner, Raner, Winso], A740
norepinephrine vasoconstriction, interaction between nitric oxide and, in anesthetized rabbits [Losser, Lenfant, Pastor, Teisseire, Payen], A562
phenylephrine, which vasopressor should one give to treat hypotension during magnesium sulfate infusion and epidural anesthesia? [Chestnut, Vincent, Sipes, Debruyn, Bleuer, Chatterjee], A824
Synapses. See under Brain

T
Tamponade. See under Heart
Temperature. See also under Recovery; Skin
body
heat storage capacity of peripheral thermal compartment [Hynson, Sessler, Moayeri, McGuire], A195
in pediatric patients, effect of lower limb tourniquet on [Ginsberg, Bloch, Binner], A957
pre-induction skin-surface warming prevents redistribution hypothermia [Moayeri, Hynson, Sessler, McGuire], A1004
skin warming during abdominal surgery in lithotomy position, prevention of hypothermia by [Delva, Camus, Just, Ollivier, Lienhart], A1011
cooling
conventional monitoring is poor correlate of efficient brain cooling [Kern, Jonas, Mayer, Hanley, Castenada, Hickey], A57
skin surface warming before epidural block bunts anesthetic-induced hypothermia [Glostenm, Hynson, Sessler, McGuire], A854
effect of, on twitch response of rabbit tibialis anterior muscle [Fauvel, Feldman], A809
heating
thermal balance using forced air warmer during abdominal surgery [Camus, Delva, Just, Crubille, Lienhart], A491
monitoring
brain, during deep hypothermia, recorded at standard monitoring sites [Stone, Young, Smith, Solomon, Ostapkovich, Wang], A483
tympanic membrane, effect of hyperventilation on, as measured by infrared scanning [Romanelli, Hiestand, Howie, Wert], A482
regulation
dose-response for thermoregulatory sweating threshold and gain during isoflurane anesthesia [Washington, Sessler, Prager, McGuire, Merrifield, Hudson, Moayeri], A194
heat storage capacity of peripheral thermal compartment [Hynson, Sessler, Moayeri, McGuire], A195
intraoperative, relation between recovery energy expenditure and [Just, Delva, Camus, Lienhart], A261
maternal, during epidural analgesia for labor [Hortvet, Camann, Hughes, Bader, Datta], A849
pre-induction skin-surface warming prevents redistribution hypothermia [Moayeri, Hynson, Sessler, McGuire], A1004
skin surface warming before epidural block bunts anestheticinduced hypothermia [Glostenm, Hynson, Sessler, McGuire], A854
skin warming during abdominal surgery in lithotomy position, prevention of hypothermia by [Delva, Camus, Just, Ollivier, Lienhart], A1011
rewarming injury impairs cerebral blood flow after hypothermic CPB [Johnston, Vinten-Johansen, DeWitt, Stump, Prough], A543
Teratogenicity. See under Toxicity
Tetracaine. See under Anesthetics, local
Theophylline. See under Pharmacology
Theories of anesthetic action
general anesthetic effects on protein kinase C activity are sub-strate-dependent [Firestone, Gray, Firestone], A1042
Meyer-Overton
general anesthetic potency of propofol is consistent with [Tonner, Poppers, Alifimoff, Miller], A586
Thiamylal. See under Anesthetics, intravenous
Thiopental. See under Anesthetics, intravenous
Thoracic anesthesia. See under Anesthesia
Thoracic surgery, See under Surgery
Thrombosis. See under Complications
Thyroid hormones. See under Hormones
Tomography. See under Measurement techniques
Tourniquets. See under Equipment
Toxicity. See also under Liver; Oxygen
bupivacaine, increased by epinephrine, in rats [Kinney, Hyman, Horn], A681
local anesthetic cardiovascular, possible mechanism of: stimulation of cyclic AMP production by bupivacaine [Butterworth, Brownlow, Cole, Prielipp, Anderson], A682
local anesthetics
cardiorespiratory toxicity of intravenous bupivacaine reduced by nimodipine, in rats [Hyman, Kinney, Horn, Skelley, Kambam], A677
IV bupivacaine with epinephrine, nicardipine reduces toxicity from, in rats [Kinney, Horn, Hyman, Skelley, Kinney], A766
lidocaine-induced convulsion, effect of acute hypertension on, in rats [Yokoyama, Benson, Goto, Unruh, Arakawa], A717
teratogenicity
developmental toxicity of non-depolarizing muscle relaxants in cultured rat embryos [Fujinaga, Baden, Mazze], A850

## Trachea. See underLung

Tracheal intubation. See Intubation, tracheal
Transducers. See under Equipment
Transfusion
autotransfusion
amniotic fluid removal from human blood through cell saver processing, In Vitro assessment of [Thornhill, O'Leary, Lussos, Rutherford, Johnson], A830
may induce secondary neuromuscular blockade in postoperative patients [Montefiore, Boico, Deghani, Bonnet, Zetlaoui], A795
complication
hyperkalemia with, in emergent and trauma surgery [Wall, Pavlin], A250
in elective surgery today in European community [Baele], A894
hemodilution during bone marrow harvest in children as means of avoiding [Perez de Sa, Bekassy, Schou, Werner], A1052
massive, in trauma center, rapid availability of blood for: new approach using blood blocks [Coveler, Werch, Todd], A109
Transplantation. See under Heart; Surgery
Transtracheal ventilation. See under Ventilation
Trauma. See under Complications
Trendelenburg's position. See under Position
Trimethaphan. See under Pharmacology
Tubes, endotracheal. See under Equipment
d-Tubocurarine. See under Neuromuscular relaxants

$$
\mathbf{U}
$$

UK-14304. See under Sympathetic nervous system, alpha-adrenergic agonists
Ultrasound. See under Measurement techniques
Urologic anesthesia. See under Anesthesia
Uterus
blood flow
cocaine-induced hypertension and response to treatment with labetalol, in ewe [Hughes, Vertommen, Rosen, Messer, Espinoza, Parer, Shnider], A1075
competitive versusnon-competitive antagonism of hypertension in chronically instrumented pregnant ewes [Hammerle, Krafft, Neumark, Poschl, Wagner], A826
does calcium chloride increase blood pressure and, during hemorrhagic hypotension in hypermagnesemic gravid ewes? [Vincent, Chestnut, Sipes, Thompson, Bleuer, Debruyn, Chatterjee], A822
epidural anesthesia worsens hypotension and, during hemorrhage, in gravid ewes [Vincent, Chestnut, Sipes, Thompson, Debruyn, Bleuer, Chatterjee], A823
fetal well-being and: effect of sevoflurane and isoflurane in pregnant sheep [Stein, Masaoka, Whody, Santos, Pedersen, Morishima, Finster], A851
maternal and fetal effects of propofol anesthesia in ewe [Alon, Rosen, Shnider, Ball, Parer], A1077
uterine and gravid ewe carotid artery dose response to phenylephrine depressed by magnesium, In Vitro [Bollen, Chestnut, Liu, Weiner], A820
uterine perfusion during pregnancy, vascular mechanism of ephedrine's beneficial effect on [Tong, Eisenach], A825
which vasopressor should one give to treat hypotension during magnesium sulfate infusion and epidural anesthesia? [Chestnut, Vincent, Sipes, Debruyn, Bleuer, Chatterjee], A824

$$
\mathbf{v}
$$

Valves. See under Equipment
Vaporizers. See under Equipment
Vascular surgery. See under Surgery
Vasculature. See under Lung
Vecuronium. See under Neuromuscular relaxants
Veins
isolated mesenteric, volatile anesthetics attenuate endogenous norepinephrine effect in, in rabbits [Stadnicka, Flynn, Bosnjak, Kampine], A572
jugular
cannulation, angle of incidence of 9.0-French, high-volume infusion introducer sheaths and relative perforating potential [Carter, Blackshear, Gravenstein], A1008
cannulation, new complication of: valve injury [Imai, Hanaoka, Sugawara], A897
complications, valve injury, in internal jugular vein cannulation [Imai, Hanaoka, Sugawara], A897
internal, cross-sectional area of, effect of Trendelenburg position and valsalva maneuver on [van de Griendt, Muhiudeen, Cassorla, Adler, Cahalan], A423
subclavian
angle of incidence of 9.0-French, high-volume infusion introducer sheaths and relative perforating potential [Carter, Blackshear, Gravenstein], A1008
superfused canine saphenous, altered release and metabolism of norepinephrine in, in presence of halothane and/or hypoxia [Kamath, Rorie, Tyce], A557
vascular wall, absorption of local anesthetics via: In Vitro study [Tambakis, Tadoori, Lovett, Doss, Pillalamari, Chaudhry, Gintautas, Abadir], A768

## Ventilation. See also under Monitoring

airway pressure
pediatric, optimal release time during [Martin, Wetzel], A263 apnea
infant apnea detection after herniorrhaphy [Bell, Dubose, Seashore, Touloukian, Oh, Hughes], A1047
postoperative, in infants, observation of [Naylor, Radharkrishnan, Thisted, McLaughlin], A955
artificial
controlled, new rebreathing circuit for [In-nami, Okada, Koshimizu], Al33
continuous positive pressure
respiratory distress treated by, through nasal mask in hematologic patients [Tognet, Mercatello, Coronel, Polo, Devaux, Bret, Archimbaud, Fiere, Moskovtchenko], A252
depression, alfentanil-induced, not affected by ondansetron [Dershwitz, Di Biase, Rosow, Wilson], A321
differential effects of ketamine and thiamylal on respiratory muscles of larynx in dogs [Iwasaki, Namiki, Omomte, Yamakage, Yamasawa], All5
high frequency
continuous and accurate end-tidal $\mathrm{CO}_{2}$ and anesthetic concentration measurements at [Perkins, Marsh], A486
percutaneous transtracheal, for endoscopic examination: hemodynamic and respiratory effects [Nakatsuka, Thomas], A117
jet
effective, can anesthesia machine flush valve provide for? [Gaughan, Benumof, Ozaki], A130
quantification of jet function of jet stylet [Gaughan, Benumof, Ozaki], Al19
limit of diaphragm activation during resistive breathing [Goldman, Walsh, Romano, Comtois, Grassino], A124
loss of hypoxic ventilatory response following bilateral modified radical neck dissection [Moorthy, Sullivan, Fallon, Dierdorf, Radpour], A1099
mandatory rate, during weaning period [Bachman, Viale, Annat, Delafosse, Motin], A253
mechanical
controlled, automated determination of pressure volume relation of lung as guide for respirator adjustment during [Putensen, Baum, Hormann], A1015
prevention of nosocomial lung infection in: selective decontamination versus endotracheal administration of aminoglycoside antibiotic [Bach, Bohrer, Geiss, Martin], A1013
not depressed by ketorolac, in rats [Rich, Schacterle, Moscicki, DiFazio, Adams], A769
pattern
monitoring hyperventilation of head injury patients, capnography for [Liu, Leighton, Caron, McBride, Bongard], A249
respiratory pattern and function in neonate, effect of branchedchain amino acid supplementation on [Blazer, Reinersman, Askanazi, Hollinger, Kvetan, Katz, Fleischman], A1093
respiratory waveforms recognition using artificial neural-networks systems [Leon, Lorini], A492
perfluorochemical, halothane anesthesia during [Kimless-Garber, Wolfson, Carlsson, Shaffer], A361
pressure support, to decrease work of breathing imposed by pediatric endotracheal tubes [Gullahorn, Banner, Berman], A256
respiratory effects of fentanyl transdermal delivery system compared to fixed interval IM morphine following spinal surgery [Torjman, Bartkowski, Marr, Lessin, Boerner], Al101
respiratory effects of IV morphine infusion in infants and toddlers following cardiac surgery [Lynn, Opheim, Nespeca, Slattery], A952
time course of ventilatory depression following propofol and thiopental [Gross, Conard, Blouin], A1095
transtracheal
low and high flow tracheal insufflation of $\mathrm{O}_{2}$ supports oxygenation in apneic dogs after TTX poisoning [Mackenzie, Barnas, Smalley, Park, Miller], A284
percutaneous high frequency, for endoscopic examination: hemodynamic and respiratory effects [Nakatsuka, Thomas], All 7
validation of breath-by-breath method for measuring respiratory quotient [Hoffman, Torres, Sportiello, Forster], A131
ventilation and ventilatory depression produced by alfentanil, effect of clonidine on, in volunteers [Jarvis, Duncan, Segal, Maze], A982
ventilatory response at four levels of sustained hypoxia [Temp, Bigoni, Ward], A1098
ventilatory response to hypoxia in awake and anesthetized humans [Sjorgren, Ebberyd, Sollevi, Lindahl], Al102

## Ventilators. See inder Equipment

Ventilatory response. See under Carbon dioxide
Ventricles. See under Heart
Verapamil. See under Heart; Pharmacology
Volatile anesthetics. See Anesthetics, volatile
Vomiting
after alfentanil-effect of dosing method [Okum, ColonnaRomano, Horrow], A2
antiemetics
droperidol, addition of, to PCA monitoring sulfate reduces nausea and vomiting [Freedman, Kreitzer, Allin, Reuben, Eisenkraft], A668
droperidol alone ineffective as, for minor gynecological outpatient anesthesia [Palot, Pety, Visseaux, Botmans, Rendoing], A36
droperidol, effect of, on SSEPS [Conroy, Bailey, Baker], A193
droperidol and vomiting after pediatric strabismus repair, P6 acupuncture [Yentis, Bissonnette], A3
efficacy of prophylactic metoclopramide for cesarean delivery [Lussos, Bader, Thornhill, Datta], A1081
evaluation of droperidol, perphenazine and metaclopramide for prophylaxis of emetic symptoms after major gynecological surgery [DeSliva, McDonald, Darvish, Cronin, Earabino, Weerasooriya], A35
nicotinic mechanism may underlie antiemetic properties of phenothiazines [Dodson, Braswell], A636
psychomotor effects of IV ondansetron in female outpatients [Pearson, From, Ostman, Demetrion, Anderson, Forbes, Joslyn], A8
sustained release prochlorperazine for prevention of nausea and vomiting in surgical outpatients [Young, Kitz, Conahan, Aukburg, Lecky], A4
impact of pain and, postoperative mood assessment in surgical outpatients [Young, Kitz, Conahan, Aukburg, Lecky], A5

## nausea

chemotherapy-induced, propofol for prevention of, in pediatric cancer patients [Scher, McDowall, Barst], A1050
droperidol alone is ineffective as antiemetic for minor gynecological outpatient anesthesia [Palot, Pety, Visseaux, Botmans, Rendoing], A36
effect of antiemetic doses of droperidol on SSEPS [Conroy, Bailey, Baker], A193
evaluation of droperidol, perphenazine and metaclopramide for prophylaxis of emetic symptoms after major gynecological surgery [DeSliva, McDonald, Darvish, Cronin, Earabino, Weerasooriya], A35
ketorolac superior to sufentanil, giving longer pain relief with less nausea and less recovery time after laparoscopy [Bellamy, Chovan, Brose, Gunzenhauser], A29
postoperative nystgmus and emesis [Larigani, Gratz, Berman, Zwillenberg], Al
reduced by addition of droperidol to PCA monitoring sulfate [Freedman, Kreitzer, Atlin, Reuben, Eisenkraft], A668
not increased by nitrous oxide, in children [Splinter, Roberts, Rhine, MacNeill, Gould, Menard, Navaneelan, Komocar], A949

X
Xenon. See under Anesthetics, gases


[^0]:    Nalbuphine. See under Analgesics; Antagonists, narcotic; Pharmacology
    Nalmefene. See under Antagonists, narcotic
    Naloxone. See under Antagonists, narcotic
    Nausea. See under Vomiting
    Nedocromil. See under Pharmacology
    Neostigmine. See under Antagonists, neuromuscular relaxants
    Nerve

