

not have been diagnosed except for this study. Only seven of the 12 patients had significant hypotension during or after operation. Eleven patients received general anesthesia. There were only two deaths. (*Driscoll, A. C., and others: Myocardial Infarction and Other Electrocardiographic Changes in the Post-operative Period, Bull. Tufts-New England Medical Center* 6:1 (Jan.-Mar.) 1960.)

CHOLINESTERASE The activity of the serum cholinesterase in 304 patients with various diseases including mental illness, Q-fever, infectious hepatitis and cardiovascular insufficiency was studied. A definite fall in cholinesterase activity was found in many pathological processes which was not specific for a particular nosologic form but depended upon the severity and duration of the pathological process. A correspondence was recorded between the increase of cardiac decompensation and depression of the enzyme activity. The cholinesterase activity depends chiefly upon the hepatic function as was particularly clearly seen in patients with infectious hepatitis. (*Salyaev, V. N., Stolyarchuk, A. A., and Ushakov, G. K.: The Cholinesterase Activity of the Blood Serum in Certain Pathologic Processes, Vrach. Delo* 9: 903, 1958.)

ANALGESIA FOR BURNS Analgesics have been administered to 39 patients during 107 burn dressings. Combinations of mepazine (intramuscularly or by mouth) with meperidine and amiphenazole (intramuscularly or intravenously) have been tried. The combination of meperidine and amiphenazole given intravenously gave the best results. One hundred to 150 mg. of meperidine were given for the age groups 4 to 14 years and 150 to 250 mg. for older patients. While this regimen proved effective for adults, it was less effective in children. Respiratory depression was noted in some cases, but no immediate ill effects were noted from this. (*Davies, M. R.: Analgesia for Burns Dressings, Lancet*, 2: 710 (Oct. 21) 1959.)

INTRATHECAL PHENOL Phenol, 10 to 25 per cent solution, dissolved in Myodil or glycerin, has been injected intrathecally in 25

patients with disseminated sclerosis, myotrophic lateral sclerosis, and other central nervous system diseases. Pain, spasticity, and muscle spasms have been relieved in all patients. Spasticity and spasms have recurred in some patients, but only in one patient has the return been severe enough to warrant another injection. (*Nathan, P. W.: Intrathecal Phenol to Relieve Spasticity in Paraplegia, Lancet* 2: 1099 (Dec. 19) 1959.)

INTRATHECAL PHENOL Dry crystalline phenol has been dissolved in Myodil to prepare 5 to 20 per cent solutions. An alternate solution of phenol crystals in glycerin in five per cent concentration has been used. The substances have been injected intrathecally in 32 patients with reflex spasms and spasticity. While the results have proven to be very effective in the relief of spasms, some patients have noted muscle weakness and sensory loss. It was least effective in long-standing quadriplegics with contractures and is advised only for bedridden patients. (*Kelly, R. E., and Gautier-Smith, P. C.: Intrathecal Phenol in the Treatment of Reflex Spasms and Spasticity, Lancet* 2: 1102 (Dec. 19) 1959.)

PROSTATECTOMY Patients needing prostatectomy are particularly susceptible to the toxic effects of many anesthetic drugs—for example, persistent curarization, apnea, or postoperative respiratory impairment with resultant chest complications. They often have respiratory or cardiovascular disease, obesity, or disturbances of fluid balance. They usually have atheromatous changes in the vascular system and are intolerant of both blood-loss and rapid or excessive blood transfusion. The anesthetic of choice for patients to have prostatectomy is premedication with atropine and morphine or meperidine, followed by a caudal block using a maximum of 15 to 25 ml. of 1.5 per cent lignocaine with 1:80,000 epinephrine. This is followed by a slow intravenous injection of 50 mg. meperidine, chlorpromazine 25 mg., and promethazine 25 mg. Thiopental 100 to 200 mg. is then given intravenously, an endotracheal tube is inserted, and nitrous oxide-oxygen administered. Muscular relaxation was obtained with either tubo-curare or gallamine. By this method there were only two deaths in

50 consecutive cases of prostatectomy. (Way, G. L: *An Anesthetic Technique for Prostatectomy*, *Lancet* 2: 888 (Nov. 21) 1959.)

DRUG ADDICTION If possible, surgery should be postponed in a drug addict until the addict has been withdrawn from the drug. If postponement is impossible, the drugs should be administered within reasonable amounts to make the patient comfortable. After convalescence the withdrawal is to start. Drug addiction among members of the medical profession is 100 times greater than among the general population. (Krantz, J. C., Jr.: *How To Cope with Drug Addiction in Hospitals*, *Mod. Hosp.* 94: 66 (Feb.) 1960.)

ANESTHETIC MACHINE A light-weight, simple, yet versatile and economically priced Boyle's apparatus is described. It weighs only seven pounds, holds up to 72 gallons of oxygen, and 400 gallons of nitrous oxide. It can easily be carried in the hand. Any standard vaporizing bottle can be used with the machine. (Burton, J. D. K.: *A Portable Anesthetic Machine*, *Lancet* 2: 650 (Oct. 24) 1959.)

HEPATECTOMY Anesthetic management of 53 patients for total hepatic lobectomy is reviewed. The age range for the patients was 16 months to 73 years. Cyclopropane was the major anesthetic agent in two patients and ether in the remainder, except for one patient who received thiopental, nitrous oxide-oxygen, and a relaxant. The operative course was uneventful in 19 patients, but in 34 excessive blood loss was a problem. Seven patients required more than 20 pints of blood. There were six operating-room deaths. Fifteen other patients died in the postoperative period. Anesthesia did not play a significant role in the development of the complications. (Schweizer, O., and Howland, W. S.: *Anesthetic Management During Total Hepatic Lobectomy*, *Surg. Gynec. & Obst.* 110: 61 (Jan.) 1960.)

NITROUS OXIDE ANALGESIA The relationship of nitrous oxide analgesia to mental performance has been determined in 24 adult volunteer subjects who were breathing 20, 30, and 40 per cent nitrous oxide in oxygen. Nitrous oxide produced significant analgesia in low concentrations, but there also appeared to be significant mental impairment. The degree of analgesia and that of mental impairment varied widely from one subject to another at the same concentrations of nitrous oxide. There appeared little correlation between the two effects of the drug, in any one person. (Parkhouse, J., and others: *Nitrous Oxide Analgesia in Relation to Mental Performance*, *J. Pharmacol. & Exper. Therap.* 128: 44 (Jan.) 1960.)

DEPTH OF ANESTHESIA The order of appearance of a number of clinical signs (wink, corneal, swallowing, endotracheal reflex, etc.) was examined after the intravenous administration of large doses of pentobarbital, thiopental, paraldehyde, trichlorethanol, and ethanol to dogs. The depression caused by these substances can be conveniently and reliably divided into five levels of intensity, which extend from the counterpart of deep anesthesia to complete freedom from ataxia. During recovery from large doses of pentobarbital and trichlorethanol, dogs spend roughly the same percentage of time in each of the defined levels of depression. In contrast after thiopental, paraldehyde, and ethanol, the animals pass rapidly through the deeper levels of depression but lose their ataxia slowly. Because of the similarity from recovery from ethanol, paraldehyde, and thiopental, doubt is raised that localization in fat is of major importance in the ultra short action of thiopental. (Maynert, E. W.: *The Usefulness of Clinical Signs for the Comparison of Intravenous Anesthetics in Dogs*, *J. Pharmacol. & Exper. Therap.* 128: 182 (Feb.) 1960.)

The "Briefs" of Russian Literature were taken from Excerptica Medica's "Abstracts of Soviet Medicine," which is supplied through the Public Health Service of the National Institute of Health.