ORAL SESSION #2

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ROPIVACAINE IS UNRELIABLE FOR USE AS A SPINAL TEST DOSE

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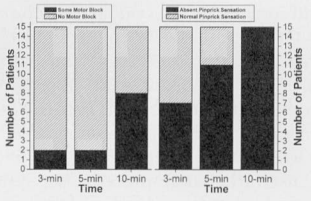
Introduction: Ropivacaine (rop) may produce less motor block than other local anesthetics. When initiating epidural anesthesia with rop, we hypothesized that the usual intrathecal (i.t.) test dose may fail to indicate a spinal drug injection because of insufficient motor block. In this study, we evaluated when motor and sensory block develop following a test dose of i.t. rop injection in volunteers. **Methods:** Following institutional approval and informed consent, 15 healthy volunteers were administered i.t. rop 10 mg (2ml, 0.5%) in the lateral position (*unlabeled use*). The onset of sensory and motor block were assessed using pinprick and a 4-point motor block scale (0=raises leg, 1=bends knee and ankle, 2=bends ankle, 3=can't move leg). **Results:** At 5 min, only 13% volunteers experienced **any degree of motor block.** By 40 min, 100% of volunteers experienced some degree of motor block. In contrast, at 5 min, 73% of volunteers had recognizable pinprick analgesia and by 10 min 100% of volunteers had sensory block. **Conclusion:**Recognizing i.t. injection of ropivacaine, 10 mg, within the customary 5 min waiting period is unreliable in non-pregnant volunteers. **Partial support:** WFUSM GCRC (MO1-RR07122)



ZUSPAN PAPERS

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TEMPORAL TRENDS IN OPERATIVE OBSTETRIC DELIVERY: 1992–1999.

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OBJECTIVE: To evaluate the rates of operative obstetric delivery by indication, gestational age, and the impact of epidural anesthesia longitudinally from 1992–1999. **METHODS:** We reviewed our obstetric database from 8/92–7/99 identify all women undergoing operative obstetric delivery. Incidence, gestational age, epidural use, and indication for each delivery were recorded and compared temporally over the study interval. Statistical analyses were performed using the Chi-square test. **RESULTS:** Over the study interval, 12491 deliveries were recorded: 72.0% spontaneous vaginal delivery, 6.8% low/outlet forcep delivery, 0.3% mid-forcep delivery, 2.1% vacuum delivery, and 17.9% cesarean section. A significant reduction in the use of forceps was noted from 1992 (10.4%) to 1999 (5.6%)($p<0.0001$) as well as a decreased rate of vacuum delivery (2.2% vs 1.3%, respectively)($p<0.05$). The rate of cesarean section gradually and significantly increased from 14.6% in 1992 to 21.4% in 1999 ($p<0.0001$). When analyzed by cesarean section indication, no significant changes were noted in the rates of cesarean section for labor arrest, presumed fetal distress, malpresentation, multifetal gestation, or elective repeat cesarean section. While epidural usage increased annually from 25% to38% over this time period, the rate of assisted vaginal delivery and cesarean section associated with epidural use did not change ($p<0.05$). **CONCLUSION:** The temporal trend of increased cesarean section rate appears to be secondary to reduced rate of forceps and vacuum assisted delivery. We could not correlate this rise in the cesarean section rate with epidural use. Ramin SM, Gambling DR, Lucas MJ, et al. Randomized trial of epidural versus intravenous analgesia during labor. **Reference:** Obstet Gynecol 86:783, 1995

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FACTORS ASSOCIATED WITH POST-PARTUM URINARY RETENTION AFTER VAGINAL DELIVERY

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Postpartum urinary retention (PUR) is a clinical problem that affects some women. The incidence and factors associated with its occurrence remain uncertain. Our aim was to determine maternal, fetal, and obstetric factors associated with clinically overt PUR, and its incidence, following vaginal delivery. After IRB approval, a retrospective case control study of women with overt PUR following vaginal delivery (August 1992 to April 2000) was conducted. PUR was categorized into 3 groups: 1) PUR resolved by 48 hours, 2) PUR resolved by 72 hours and 3) PUR unresolved for ≥72 hours. This clinical sub-classification of overt PUR was used to stratify the length of retention. For univariate comparisons, the X^2test or student's t-test was used for categorical and continuous data, respectively. Two-tailed tests were used in all cases. P values ≤0.05 were considered significant. 51 of 11,332 (0.45%) vaginal deliveries were complicated by clinically overt PUR. 80.4% of cases resolved prior to hospital discharge. Those with PUR were more likely than controls to be primiparous (66.7% vs. 40.0%, $p<.001$), have had an instrumental delivery (ID) (47.1% vs. 12.4%, $p<.001$), received regional analgesia (98.0% vs. 68.8%, $p<.001$), and have had a mediolateral episiotomy (39.2% vs. 12.5%, $p<.001$). As ID may need regional anesthesia, we conducted a logistic regression to determine if regional anesthesia and ID were associated. ID adjusted for regional anesthesia Odds Ratio = 4.35 $p\leq0.001$ (χ^2-Test), regional anesthesia without ID Odds Ratio 17.46, $p\leq0.001$ (χ^2-Test). All regional anesthetics contained either epidural or intrathecal fentanyl. Clinically overt PUR complicates nearly 1/200 vaginal deliveries with most resolving prior to hospital discharge. Factors associated with its occurrence include primiparity, ID, regional analgesia, and mediolateral episiotomy.