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Obstetrics and Pediatrics

PARACERVICAL BLOCK Paracervical block was performed in 15 mothers in labor and maternal and fetal mepivacaine concentrations were determined. Blood was obtained from the maternal vein, fetal scalp during labor, and umbilical vessels at birth. Fetal blood also was analyzed for acid–base parameters. Mepivacaine levels averaged 8.5 μg/ml in the mothers and 7.4 μg/ml in the fetuses. Fetal blood levels were consistently lower than maternal levels. All but one infant had Apgar scores of 8 or 9. Fetal bradycardia was encountered in three cases; two episodes were transient and associated with Apgar scores of 8, and in the third, bradycardia persisted until delivery and was associated with a score of 4. The only significant *p*H variation was in the infant with persistent bradycardia. The highest mepivacaine concentrations were found in the three cases with fetal bradycardia. It is probable that a normal fetus can tolerate clinically-induced levels of mepivacaine, but that infants depressed by acidosis may be compromised. Fetal bradycardia as a result of drug toxicity should be distinguished from that due to fetal asphyxia. Paracervical block is contraindicated when placental insufficiency is anticipated. (*Gordon, H. R.: Fetal Bradycardia After Paracervical Block, New Eng. J. Med. 279: 910 (Oct.) 1968.*)

ABSTRACTER'S COMMENT: Drs. Sol Shnider and associates, in the correspondence section of the same journal, report significantly higher fetal mepivacaine levels in infants that had bradycardia than those that did not. Furthermore, mepivacaine levels in the infants with bradycardia exceeded maternal levels, indicating the drug found its way directly from paracervical tissue to the intervillous space. Objective data such as these will help decide the usefulness of paracervical block with mepivacaine.