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Obstetric Anesthesia

CESAREAN SECTION UNDER LOCAL

The histories of 5,010 patients whose infants were delivered by the senior author over a period of 25 years are reviewed. Of these deliveries, cesarean section was performed in 283 (5.6 per cent). In 218 of these patients, only local field block of the abdominal wall was done prior to the birth of the baby. When local anesthesia was used, 92 per cent of newborn babies cried spontaneously at once. There were 48 premature babies and seven neonatal deaths, the latter caused primarily by complications of pregnancy and secondarily by prematurity. Fetuses already at high risk are most benefited by the use of local anesthesia prior to birth. Many of the patients experiencing this method had second, third, and even fourth cesarean sections with the use of local anesthesia. (Ranney B, Stange WF: *Advantages of Local Anesthesia for Cesarean Section*. *Obstet Gynecol* 45: 163-167, 1975.)

BUPIVACAINE EPIDURAL Lumbar epidural analgesia with bupivacaine was given to 37 women for uncomplicated labor. After the blockade, serial determinations of pH and bupivacaine concentration were made in fetal scalp blood and maternal venous

blood and there was continuous monitoring of the fetal heart rate. Fetal scalp blood pH was within normal limits and no pathologic FHR tracings were elicited by the blockade, although a temporary decrease of the baseline fetal heart rate irregularity was seen in about a fifth of the cases. Fetal drug concentrations were low, about 1 fourth of corresponding maternal values. After reinjection of bupivacaine the extents of drug accumulation in fetal and maternal blood were fairly similar. (Belfrage P, and others: *Lumbar Epidural Analgesia with Bupivacaine in Labor*. *Am J Obstet Gynecol* 121: 360-365, 1975.)

Fetal Development

NEURAL TUBE DEFECTS The prenatal diagnosis of neural tube defects (such as anencephaly, myelomeningocele) is now possible in about 90 per cent of cases by assaying the amniotic fluid for alpha-fetoprotein. The accuracy of beta-trace protein assays on amniotic fluid samples from defective fetuses was compared with alpha-fetoprotein studies. Alpha-fetoprotein studies provided more reliable results than beta-trace protein. (Milunsky A, and others: *Prenatal Detection of Neural Tube Defects*. *Am J Obstet Gynecol* 122: 313-315, 1975.)