

On the other hand, epidural administration of lidocaine (400-600 mg.) and general anesthesia in 10 cases did not induce any methemoglobinemia. (Tyuma, I., and others: *Methemoglobin Formation by a New Local Anesthetic L-67 (Japanese)*, *Far East J. Anesth.* 5: 32, 1965.)

**CSF PRESSURE IN LABOR** Twenty women at or near term were studied during spontaneous or oxytocin induced labor. All were delivered vaginally. Intrauterine pressure, femoral arterial pressure, cerebrospinal fluid pressure and/or epidural space pressure were monitored with transducers. Anesthetic techniques were continuous caudal, epidural or spinal. The authors found that there is a consistent rise in cerebrospinal fluid pressure, central venous pressure, arterial blood pressure, stroke volume and cardiac output with uterine contractions. However, there was no relationship between the time of anesthetic injection in the cycle of uterine contractions and the extent of regional anesthesia obtained. (Hopkins, E. L., Hendricks, C. H., and Cibils, L. A.: *Cerebrospinal Fluid Pressure in Labor*, *Amer. J. Obstet. Gynec.* 93: 907 (Dec.) 1965.)

**TOXEMIA OF PREGNANCY** All signs and symptoms of toxemia of pregnancy may be explained by abnormal sodium retention and generalized vasoconstriction. The toxemic process is initiated by the phase (one) of sodium retention characterized by an increase in plasma volume. This is followed by the phase (two) of sodium retention plus generalized vasoconstriction, characterized by a decrease in plasma volume. Thiazide diuretics administered in the sodium-retaining (first) phase produce a decrease in plasma volume, thus returning the hemodynamic state to normal and preventing the development of vasoconstriction. However, if thiazide diuretics are not administered until the phase (two) which includes generalized vasoconstriction, they do not reverse the toxemic process. Once vasoconstriction is present, no known therapy is capable of altering the disease process or fetal mortality. The availability of the thiazides has completely changed the concept of the treatment of toxemia. When used alone at the first sign of excessive weight gain, the thia-

zides frequently prevent the development of generalized vasoconstriction which, for practical purposes, is equivalent to prevention of toxemia. The thiazides have not been incriminated as a cause of congenital anomalies; however, all drugs not absolutely essential should be withheld during the first 12 weeks of pregnancy. The prophylactic use of the thiazides can not only protect the mother from toxemia but can also significantly reduce perinatal mortality and prematurity. (Finnerty, F. A., and Bepko, F. J.: *Lowering the Perinatal Mortality and the Prematurity Rate*, *J.A.M.A.* 195: 429 (Feb.) 1966.)

**CAUDAL ANESTHESIA** Apnea, bradycardia persisting despite oxygenation and convulsions in the first minutes of life were characteristic findings in four babies born alive after being accidentally injected with mepivacaine during caudal anesthesia of the mother. Respiratory support and measures to remove the drug from the baby were utilized. Two newborns who received exchange transfusions survived. The drug appeared to be concentrated in gastric juice and in urine suggesting that removal of such acid pools within the body may result in significant drug elimination. In each instance the mother had experienced uncomplicated pregnancy and was well advanced in labor with the fetal head engaged at station +2 or +3 when the caudal needle was introduced. In three instances, a polyvinyl catheter was threaded through a needle inserted through what was assumed to be sacral hiatus and mepivacaine injected in divided doses over a 30 minute period. In the fourth instance, a single injection was given through a 6 cm. needle. Each woman received a total of 20 to 25 ml. of 1.5 per cent mepivacaine. (Sinclair, J. C., and others: *Intoxication of the Fetus by a Local Anesthetic*, *New Eng. J. Med.* 273: 1173 (Nov.) 1965.)

**PARACERVICAL BLOCK** The efficacy and safety of paracervical block anesthesia were studied in 153 patients in the first stage of labor. Transient decrease in uterine activity was noted in 77 patients. There was no acceleration in cervical dilatation following the block. In 69 of 80 primiparas, the duration

of action of the block was 31 to 120 minutes and in 5 was over 120 minutes. In the 73 multiparas, 53 of the blocks lasted 31 to 90 minutes and two over 120 minutes. The results were good in 66 primiparas and 54 multiparas. The blocks failed in 4 primiparas and 6 multiparas. Twenty-six infants had low Apgar scores but in none could this be related to the paracervical block. There were no significant fetal or maternal complications. (Van Praagh, C., and Povey, W.: *Paracervical Block Anesthesia in Labour, Canad. Med. Ass. J.* 94: 262 (Feb.) 1966.)

**PARACERVICAL BLOCK** When general anesthesia or sophisticated forms of conduction anesthesia were unavailable or contraindicated, paracervical block was used for dilatation and curettage in 37 patients. Ten milliliters of either 1 per cent lidocaine or procaine or 5 ml. of 2 per cent lidocaine was placed into each lateral fornix with a standard 6-inch, 20-gauge needle at a depth of 6 to 12 millimeters. The block's effect was good in 34 cases and fair in 3; there were no failures. No significant complications occurred. The necessity of guarding against and being prepared to treat local anesthetic sensitivity is recognized. Paracervical block proved to be a convenient, safe, simple and effective anesthetic technique for dilatation and curettage, including when other anesthetic techniques were contraindicated. (Praag, I., and Povey, W.: *The Use of Paracervical Block Anesthesia for Dilatation and Curettage, Canad. Med. Assoc. J.* 94: 267 (Feb.) 1966.)

**NEUROLEPT ANESTHESIA** Neurolept-analgesia was used in neurosurgical procedures with haloperidol and dextromoramide or with dehydrobenzperidol and phentanyl and supplemented with nitrous oxide and oxygen. In all cases authors used the Engstrom respirator and hyperventilation in the first hours. It was observed that the respiratory rate was somewhat slower and the blood pressure slightly decreased from the preoperative period. The brain was of small size. It is suggested that the glial cells are responsible for the development of cerebral edema and that the two analgesics used have a specific effect on the glial cells which prevents it. (Torrelli, L., and Schiavi, F.: *Neuroleptanalgesia with Pre-*

*dominant Use of Analgesia in Neurosurgery, Agressologie* 6: 327 (May) 1965.)

**NEUROLEPT ANESTHESIA** Neurolept-analgesia supplemented with nitrous oxide and oxygen was used in 104 cases of surgery for vascular anomalies. All patients received 30 per cent glucose with 40 units of insulin and calcium chloride and potassium lactate intravenously. Various drugs were used for neuroleptanalgesia but most recently hydroxygammabutyric acid. It is stressed that in these cases additional potassium must be given preoperatively. Additional analgesia, if needed, is provided with fractional doses of pyrrolamadol. Temperature is lowered by surface cooling to 29° C. Pulse rate is slower and blood pressure 30 to 40 mm. of mercury lower than before operation. No serious complications attributable to anesthesia technique could be observed in this group of patients. There were two pregnant women anesthetized in this manner and later both delivered healthy infants. (Perraut, C., Laborit, H., and Kind, A.: *Use of Artificial Hibernation in Vascular Surgery of the Brain, Agressologie* 6: 332 (May) 1965.)

**PENTAZOCINE** Pentazocine (WIN 20,228) was administered to 216 postoperative patients or to patients suffering from nonsurgical pain. Thirty milligrams of pentazocine subcutaneously or intramuscularly produced analgesia equal to that of 50 to 75 mg. of meperidine or 10 mg. of morphine; 60 mg. of pentazocine provided analgesia equivalent to 100 mg. of meperidine or 15 mg. of morphine. Nausea and vomiting were very common in the postoperative patient after pentazocine but were easily controlled with antiemetics. Significant hypotension was not observed. Psychic depression and euphoria were absent after pentazocine. This is desirable in patients who should remain alert; however, morphine and meperidine are superior when psychic depression is desired. Abrupt stoppage of the drug in one patient after prolonged administration was tolerated without signs of narcotic withdrawal. (Henshaw, J. R., and others: *Pentazocine: A Potent Nonaddictive Analgesic, Amer. J. Med. Sci.* 251: 57 (Jan.) 1966.)