

Pitocin was used when the progress of labor was slowed by the anesthesia. The pitocin was given in carefully graded doses. Nausea, vomiting, dizziness or headache occurred in 26 per cent of the cases. Adequate sedation, oxygen inhalation and dextrose solutions intravenously helped control these mild toxic reactions.

Mild headache followed delivery in 15 per cent of the patients. No infections or "back trouble" resulted. One patient developed a pain over the sacrum on the second day postpartum. A hyperemic area surrounded by a zone of hyperesthesia accounted for the discomfort. The pain and the lesion gradually disappeared. In three instances fetal tachycardia developed. The anesthesia was not discontinued and no deleterious results were encountered. 20 references.

F. A. M.

PARMLEY, R. T., AND ADRIANI, JOHN: *Saddle Block Anesthesia with Nupercaine in Obstetrics*. Am. J. Obst. & Gynec. 52: 636-640 (Oct.) 1946.

Saddle block is a term applied to low spinal anesthesia confined to the perineal area. Nupercaine has been used with a high degree of satisfaction by many workers. Roman and Adriani simplified the technic for using nupercaine for general surgery by mixing it with glucose and have good results with saddle block for rectal, urologic and gynecologic surgery with nupercaine as the drug of choice.

In 136 obstetric patients nupercaine saddle block was used with gratifying results. The equipment for saddle block is the same as for any spinal anesthetic. The puncture is made, preferably in the fourth lumbar interspace, with the patient in the sitting position. A free flow of spinal fluid must be obtained to assure correct placement of the bevel of the needle in the subarachnoid

space. As little spinal fluid as possible should be aspirated to avoid undesirable dilution of the anesthetic. After injecting the drug slowly the patient remains upright for thirty seconds, then she is placed in the recumbent position. Moving about is not permitted for the first five or ten minutes. When the patient sits up for thirty seconds a greater concentration of the drug localizes in the conus than if she is promptly allowed to assume the recumbent position. Uterine contractions continue but the patient must be told to bear down as she is unaware of the contractions. Two and one-half mg. of nupercaine (1/2 cc. of 1/200 solution) is mixed with 1/2 cc. of glucose solution. The average duration of analgesia was three hours. Pain of uterine contraction usually returned in three hours, but the perineum was still anesthetized. Complete relief of pain during labor and delivery occurred in 81 per cent of the patients. Inhalation of analgesic mixtures of nitrous oxide-oxygen was sufficient to relieve the dull ache which resulted in 14 per cent of the patients when forceps were applied or during traction. In 5 per cent of the patients anesthesia was unsatisfactory, probably due to faulty technic. The block was repeated after fifteen minutes and was successful the second time in every case.

The patients were comfortable and cooperative. In 68 per cent a single block was sufficient. In 32 per cent repeated blocks were necessary. Momentary fall in blood pressure, usually about 10 mm. systolic, was relieved by deep breathing. The hypotension with bradycardia, often seen with spinal anesthesia, occurred in only 3 cases. Ephedrine, intravenously, relieved these pressure changes. No respiratory depressions, rectal or urinary incontinence or postoperative headache was observed. No remarkable effect on the duration of labor was apparent. The

method is worthy of further clinical trial. 8 references.

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GOTTSCHALK, R. II.: *Respiration During the First Hour of Life*. Am. J. Obst. & Gynec. 52: 651-656 (Oct.) 1946.

A study was made to determine if the use of demerol and hyoscine during labor exerted any action on the respiration of the newborn infant when given in dosages recommended by Roby and Schumann. Accurate information on the respiration of the newborn from the time of birth to one hour of age was also sought. A total of 68 records of respiration in 40 infants during their first hour of life and 53 records on 31 newborns whose mothers had received demerol and hyoscine, were obtained. Study of the records has shown that demerol and hyoscine, no matter when administered, exert no influence on the respiration of the newborn from 7 minutes to one hour of age. It was shown that a general anesthetic (ether and cyclopropane), when it is properly administered, has no effect on the respiration of the newborn after 7 minutes of age. 3 references.

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TAYLOR, E. S.: *Anesthesia and Analgesia in Obstetrics*. Northwest Med. 45: 740-743 (Oct.) 1946.

Obstetrics is advertised by the lay press and the lay grape-vine, not for the low stillbirth rate, low incidence of eclampsia, postpartum hemorrhage or cesarean section, but exclusively for the relief of pain during labor. A moderate amount of pain is normal and everything compatible with safety for the mother and baby will be done by the obstetrician.

Morphine and scopolamine in small doses can be used for analgesia but this combination of drugs is not satisfactory in multiparous labors, in inertia cases,

in premature labors or in multiple pregnancies. Demerol with scopolamine is probably the most satisfactory all-purpose analgesia for labor. When labor is established and the patient begins to mind her pains, demerol, 100 mg., scopolamine, gr. 1/150, is given. Forty-five minutes later scopolamine, gr. 1/150, is repeated. Demerol, 100 mg., is repeated every four hours. Scopolamine, gr. 1/200, is given each two hours. Restlessness results from the scopolamine so the patient must be attended. Intramuscular or intravenous administration of demerol is best. Demerol without scopolamine is less effective but should be used when supervision is not adequate. The barbiturates do not relieve pain; they produce amnesia. With scopolamine the barbiturates produce amnesia in 85 per cent of cases. Respiratory complications in the mothers are fairly common following barbiturates and scopolamine and also after paraldehyde. Continuous caudal anesthesia requires constant attendance of an expert anesthetist, is not suitable for many cases and is not without danger. For the delivery stage inhalation and local anesthesia are being used the most. Of the inhalation anesthetics, ether is the safest. Chloroform is a valuable anesthetic if it is used with caution. Nitrous oxide is a good anesthetic for the delivery. Prolonged general anesthesia is dangerous to the mother and the baby.

Pudendal block anesthesia for delivery and repair is the perfect anesthesia for the patient, the baby and the doctor. Practice will improve the technic of the operator and one can expect as high as 95 per cent of successful pudendal blocks. Local anesthesia for cesarean section is excellent and safe. Too little information is available as to the blood saving qualities of local anesthesia in obstetrics. 8 references.

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