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Neonatology

OXYTOCIN CHALLENGE It has been suggested that applying standard stress with oxytocin during the antenatal period may be of use in assessing fetal well-being or the ability of the fetus to withstand labor. The oxytocin challenge test was applied to a group of 50 high-risk obstetric patients, and the results were correlated with urinary estriol, the occurrence of fetal distress in labor, Apgar score, and high-risk index. Thirty-five patients had negative tests, nine had positive tests, and six had only unsatisfactory tests. There was no correlation between a positive test and low estriol level, the occurrence of fetal distress in labor, or Apgar score. However, the results suggest that a negative test in a high-risk pregnancy may indicate that the pregnancy should be allowed to continue. (Christie, G. B., and Cudmore, D. W.: *The Oxytocin Challenge Test*, *Am J Obstet Gynecol* 118:327-330, (February 1) 1974.)

RITODRINE EFFECTS ON MOTHER AND FETUS The effects of administration of ritodrine hydrochloride (150 μ g/min) on uterine activity and maternal and fetal cardiovascular status were evaluated in ten patients in active labor.

Ritodrine infusion resulted in a marked decrease in uterine activity and increase in maternal pulse rate (40 beats/min), with minimal increase in pulse pressure. These

changes were maximal 30 minutes after the start of infusion. Maternal tachycardia persisted after discontinuation of the drug. Nonspecific ECG changes were considered to be rate-related. Ritodrine caused no change in the fetal heart rate, ECG, or acid-base status. (Nichimson, D. J., and others: *The Effects of Ritodrine Hydrochloride on Uterine Activity and the Cardiovascular System*, *Am J Obstet Gynecol* 118:523-528, 1974.)

BLOOD VOLUMES OF INFANTS BORN BY CESAREAN SECTION The total blood plasma and erythrocyte volumes of 23 term neonates born by cesarean section were studied with respect to time of cord clamping and position of the infant. Immediate clamping at the level of the uterus resulted in blood volume comparable to that previously reported for the term fetus born after vaginal delivery (87 ml/kg). Delayed clamping of the cord (3 minutes postpartum) with the infant held 15 cm above the uterus caused a significant reduction in blood volumes (67 ml/kg). In contrast, delayed clamping with the infant placed 15 cm below the uterus resulted in increased volume (106 ml/kg). (Sisson, T. R. C., and others: *The blood volume of infants. IV. Infants born by cesarean section*, *Am J Obstet Gynecol* 117:351-357, 1973.)