## JOURNAL ABSTRACTS — LINDA BAXTER, C.N.M., M.S.



## Antenatal Corticosteroids: Risk versus Benefit

Depp R, Boehm J, Nosek J, Dooley S, Hobart J: Antenatal corticosteroids to prevent neonatal respiratory distress syndrome: Risk versus benefit considerations. Am J Obstet Gynecol 137:338, 1980.

These authors, having acknowledged the risks associated with antenatal steroid administration, have attempted to define both a subgroup of patients most likely to derive maximum benefit from steroids and a subgroup in whom the risks outweigh the benefits.

In this study, 439 patients at risk for delivery between 28 and 37 wk gestation were evaluated for their likelihood of benefitting from steroids. Patients were excluded from steroid therapy when the L/S ratio was mature, there was evidence of infection, the cervix was dilated more than 5 cm, or the estimated time to delivery was less than 24 hr or longer than 7 days.

In this study 35% of patients 34–37 wk and 19% of those less than 34 wk had mature L/S ratios, and were excluded. Seventy-nine percent of the 194 patients less than 34 wk who were excluded from receiving of steroids were excluded because of anticipated delivery outside the ideal 24 hr to 7 day interval. Eighty-seven percent of the 198 excluded patients in the more than 34 wk group were excluded for the same reason.

After all the exclusions, from an original study population of 439, only 47 patients (10.9%) were ideal candidates for steroids. And of these, only 31 patients (6.9% of the total group) actually delivered within the ideal time interval.

The authors point out that based on these data, "it is clear that only a small percentage of patients at risk for delivery prior to 37 weeks can derive benefit (from steroids); most are at less than 34 weeks."

Depp, in his closing comments objects strongly "that steroids cannot, as they presently are nationally, be given in almost an indiscriminant manner to patients with poorly documented dates, uncertain surfactant status, and with little consideration for criteria of benefit versus exclusion."

## Effects of Betadine on Vaginal Flora

Monif G, Thompson J, Stephens H, Baer H: Quantitative and qualitative effects of povidone iodine liquid and gel on the aerobic and anaerobic flora of the female genital tract. Am J Obstet Gynecol 137:432, 1980.

This small study attempts to demonstrate the antibacterial effects of povidone iodine when applied in the vagina.

Forty cultures were obtained from 10 study subjects. Each subject was cultured initially and her cervix and vagina were painted with either 10% povidone—iodine (Betadine solution) or 10 ml of physiologic saline. Some patients were also tested using 5 g of Betadine gel.

Ten minutes after the application of the Betadine solution there was a dramatic fall in the number of both aerobes and anaerobes recovered from the vagina. At 30 min, the preexisting flora were beginning to become reestablished, and by 120 min the bacterial flora were completely reestablished.

When the vehicle for the iodine was changed, as in the Betadine gel, the antibacterial effect was highly significant as long as 2 and 3 hr.

The authors point out that although theoretically this local antisepsis might be useful, other researchers have shown that alterations produced in the vaginal flora have not affected the endocervical flora, those most responsible for perioperative morbidity.

## **Breech Management**

Graves W: Breech delivery in twenty years of practice. Am J Obstet Gynecol 137:229, 1980.

This article reports the 141 singleton breeches delivered vaginally by the author and his partners in private practice over a twenty year period.

Eighty-two (62%) of these mothers were contacted for follow-up ranging from 2 to 20 yr. A particular effort was made to contact all those whose records indicated difficulty in delivery or other reasons to suspect neurologic problems.

Among infants weighing more than 2500 g, one had a mild subdural hematoma with no sequellae at age 6 yr and one had a fractured clavicle with full recovery and normal strength at age 17 yr. There were no brachial plexus injuries at all. One other infant, with a birth weight of 4500 g, was delivered easily, yet at age 16 has definite learning disabilities and has received Dilantin.

Maternal complications were low in both the vaginally delivered mothers and in those delivered by cesarean section.

There were seven perinatal deaths among 103 vaginal deliveries: three weighed less than 1000 g, three had serious congenital anomalies, and the seventh was a 1250-g footling breech delivered by partial extraction. This is the only death that seems to have been preventable through more liberal use of cesarean section.

In conclusion, the author notes that among term normal weight infants, neurologic or intellectual abnormality did not appear de novo after the neonatal period.

He suggests allowing patients greater participation in the decision making when faced with a term breech presentation.