Steroids Before Elective C-Section at Term Studied

**BY JEFF EVANS**
Senior Writer

A single course of betamethasone before elective cesarean section at term may decrease the risk of developing neonatal respiratory distress or transient tachypnea, according to the results of a controlled trial.

The 10-center trial is the first of its kind to test the use of prenatal corticosteroids in women who were delivered by elective cesarean section at term (BMJ. doi:10.1136/bmj.38547.416493.06 [2005]). Infants whose mothers received betamethasone had a significantly lower rate of admission to the special care baby unit (11 of 467) vs. control infants (24 of 475). Betamethasone treatment reduced the incidence of admission to a special care baby unit to 5% vs. 12% for mothers treated with placebo. Still, Alex Vidaeff, M.D., of the University of Texas, Houston, questioned the selection of patients for the study. He also noted that the risk-benefit ratio at more than 34 weeks’ gestation is not favorable because the risk level already is low in this group.

In the study, during the 48 hours before elective cesarean section, the women received either two intramuscular doses of 12 mg of betamethasone separated by 24 hours or placebo treatment as usual without corticosteroids.

The severity and type of respiratory distress (transient tachypnea in 10 treated and 19 control babies) were similar among all babies who were admitted to a special care baby unit. Among mothers who had a baby admitted to a special care baby unit, significantly more mothers of infants exposed to betamethasone received general anesthesia than did mothers of control infants (45% vs. 6%). Betamethasone-exposed babies also had betamethasone required neonatal resuscitation (73% vs. 12%) or ventilation through a mask (36% vs. 0%) significantly more often than control babies.

But 2.9% of control babies received intensive care, compared with only 0.4% of babies treated with betamethasone.

The probability of admission to the special care baby unit with respiratory distress declined as the gestational age of the baby increased in the betamethasone and control groups from 37 weeks (5% vs. 11%, respectively) to 39 weeks (6% vs. 2%) to 40 weeks (0.6% vs. 1.5%), according to a logistic regression model.

There were no reports of wound infection or neonatal sepsis. Among seven women who received betamethasone, five reported generalized flushing, one had tenderness at the injection site, and one had nausea, one had tenderness at the injection site. There were no reports of wound infection or neonatal sepsis. Among seven women who received betamethasone, five reported generalized flushing, one had tenderness at the injection site, and one had nausea.