Prepregnancy Obesity Linked to Birth Defects

**BY MARY ANN MOON**

**Contributing Writer**

Maternal obesity before pregnancy significantly increased the risk for offspring with anorectal atresia, hypertelorism, atrioventricular septal defect, diaphragmatic hernia, and omphalocele in a large, prospective study. D. Kim Waller, Ph.D., of the University of Texas School of Public Health, Houston, and her associates used data from the National Birth Defects Prevention Study to assess whether maternal weight affected risk for several categories of structural birth defects. This is the first study to report a link between maternal obesity and these five types of defects using sufficient sample sizes of 130 or more cases.

More than half of American women aged 20-39 years are estimated to be overweight (with a body mass index [kg/m2] in a range greater than or equal to 25 up to less than 30), or obese (BMI greater than or equal to 30). A strong association between these conditions and higher fetal risk for spina bifida and heart defects has already been reported. However, “the potential relation between obesity and other birth defects remains less certain, as those studies that have examined a range of different birth defects did not have sufficient numbers of cases to generate precise odds ratios,” Dr. Waller and her associates said.

The investigators analyzed data on 10,249 babies born with structural birth defects in eight states from 1997 and 2002, as well as 4,065 control subjects representative of the general population.

Maternal obesity was found to raise the risk for spina bifida and heart defects, confirming the findings of previous studies. It also significantly increased the risk for anorectal atresia, hypoplasia, limb reduction defects, diaphragmatic hernia, and omphalocele, with odds ratios ranging from 1.3 to 1.6. Maternal obesity also carried a borderline increase in risk for cleft palate, the researchers said (Arch. Pediatr. Adolesc. Med. 2007;161:745-50).

Maternal overweight significantly increased the risk for heart defects, hypoplasia, and omphalocele, and slightly raised the risk for craniostenosis.

Unlike previous studies, this analysis failed to demonstrate an association between maternal obesity and anencephaly, hydrocephaly, or cleft lip. However, this finding may have been the result of chance, because the number of cases of these three birth defects was relatively low.

**Routine Enema in First Stage of Labor May Prolong Delivery**

**BY BETSY BATES**

Los Angeles Bureau

San Diego — Routine use of an enema during the first stage of labor significantly prolonged the time to delivery in a randomized trial conducted at the Carolinas Medical Center in Charlotte, N.C.

Although routine enemas have been abandoned in many hospitals, anecdotal beliefs persist that the procedure enhances uterine stimulation and makes for a “cleaner delivery,” and reduces neonatal wound infections. Dr. Noelle T. Clarke said. Labor and delivery nurses in some regions hold to the notion that enemas for this purpose are best administered “high and hot and a hell of a lot,” she noted following the oral presentation of her study.

To see if enemas do reduce labor time, Dr. Clarke and coinvestigator Dr. Todd R. Jenkins conducted a trial that randomized 152 women in uncomplicated early labor at their institution either to undergo an enema or to have no enema on admission. At baseline, the two groups were similar in terms of parity, age, and other relevant variables. Enemas were performed using a standard protocol (1 L. water plus two packets of castile soap at a mean cervical dilation of 3.6 cm). Mean time to delivery was 69 minutes in 75 women who received enemas, vs. 393 minutes in 77 women who did not receive an enema, for a highly statistically significant difference of 112 minutes.

Intrapartum infection rates were 12.3% among patients receiving enemas and 2.7% for those receiving no enema, however, this difference lost its significance when investigators controlled for differences in duration of membrane rupture.

No differences were seen between groups in epidural use, delivery mode, or presence of meconium, she said at the annual meeting of the American College of Obstetricians and Gynecologists.

Women who underwent a routine enema had less fecal soiling at delivery, observed in 8 of 75 (11%) in the enema group vs. 23 of 77 (30%) in the group that received no enema. Dr. Clarke said the study results were accepted by some, but not all, experienced labor nurses; laboratory analysis of stool samples revealed no significant difference in the number of cases of these three birth defects was relatively low.