Subsequent Infants Are at Risk After SIDS Death

BY MARY ANN MOON
Contributing Writer

Women who have had a baby who died from SIDS are more likely to have preterm birth or intrauterine growth restriction in their next pregnancy than are other women, reported Dr. Gordon C.S. Smith of the University of Cambridge (England) and his associates.

Similarly, women who have had a preterm or small-for-gestational-age (SGA) infant in one pregnancy are more likely to have a baby who dies from SIDS in the next pregnancy.

These associations were discovered in an analysis of large, comprehensive medical databases, and they strongly persisted when the data were adjusted for numerous maternal and demographic factors. However, the associations disappeared when gestational age and intrauterine growth restriction (IUGR) were factored into the analysis. From this finding, the investigators concluded that the link between SIDS and preterm birth/intrauterine growth restriction in other pregnancies is due to an as yet unknown maternal factor that underlies both disorders.

In the analysis, Dr. Smith and his associates reviewed information in a database on all Scottish in-hospital births, another database on all perinatal deaths in Scotland, and a third database on all Scottish birth and death records. They narrowed their study to focus on the records of 258,096 women who had one singleton birth between 1985 and 2001 and a second singleton birth between 1992 and 2001.

There were 332 women whose first infant died from SIDS, and 203 whose second infant died from SIDS, the investigators said (Lancet 2005;366:2107-11).

Women whose first infant died from SIDS were two to three times more likely to have a preterm delivery and two to three times more likely to deliver an SGA infant in the next pregnancy than were other women.

In women whose first delivery was preterm or whose first pregnancy was affected by IUGR, the risk of SIDS was elevated in the baby delivered in the subsequent pregnancy.

"We speculate that the association between SIDS in one pregnancy and obstetric complications in other pregnancies partly explains the tendency for SIDS events to recur," they said. ■

Continuous Insulin Infusion Rated Superior

MIAMI BEACH — Continuous subcutaneous insulin lispro infusion appears to be superior to multiple daily insulin lispro injections for the treatment of pregnant women with type 1 diabetes, Dr. Giorgio Mello reported at the annual meeting of the Society for Maternal-Fetal Medicine.

In a randomized controlled study of 71 pregnant women with type 1 diabetes and 142 matched, nondiabetic, pregnant controls, continuous subcutaneous insulin infusions (CSII) were found to mimic more closely than multiple daily injections (given as a premeal bolus) the normal postprandial glucose excursion pattern.

The CSII approach also was associated with fetal fat mass growth patterns similar to those seen in normal pregnancies, said Dr. Mello of the University of Florence, Italy.

The postprandial glucose excursions were calculated as areas under the curves at 0-1, 1-2, 2-4, and 0-4 hours in the three-meal postprandial area. Patients in both treatment groups had similar average daily glucose levels throughout gestation. But at 16-, 26-, and 36-week evaluations, those in the CSII group had 24-hour glycemic profiles similar to the normal group; those in the multiple daily injections group had a significantly longer time period in the three-meal postprandial areas.

Furthermore, fetuses in the CSII group, but not in the multiple daily injection group, had growth patterns similar to those of controls, as measured by ultrasound scans performed every 2 weeks between 25 and 38 weeks' gestation. Those in the multiple daily injections group had significantly higher abdominal and midthigh fat deposition during that period, Dr. Mello noted.

—Sharon Worcester