M I AMI B E ACH — Individuals born preterm birth diminishes child’s long-term survival, as well as diminished preterm have diminished short- and mortality (N. Engl. J. Med. 1996;335:889-95), said Dr. Saugstad of the department of pediatric research at the Rikshospitalet University Hospital, Oslo, Dr. Saugstad and his colleagues have conducted a prospective study comparing 17,828 planned vaginal deliveries and 825 elective C-sections that occurred during January through June 1999 in Norway. There was no difference between the two groups in neonatal mortality or the percentage of infants with an Apgar score of less than 7 at 1 minute or less than 4 at 5 minutes. But significantly more infants who were delivered with a planned C-section were transferred to the neonatal ICU (18%) than were babies born with a planned vaginal delivery (9%). Babies delivered by a planned C-section also had significantly higher rates of pulmonary disorders, hyaline membrane, and anemia. Vaginally born infants were delivered at an older mean gestational age than C-section infants (39.4 weeks vs. 38.4 weeks) in the study, which is in press for the American Journal of Obstetrics and Gynecology.

In studies involving small or extremely low-birth-weight infants, comparisons of elective versus selective C-section, C-section with labor versus C-section without labor, and vaginal delivery versus C-section have generally shown no significant differences in perinatal or maternal outcomes. But these studies have mostly been retrospective and have often compared infants of dissimilar gestational age and birth weight, Dr. Saugstad said.

A Cochrane review of six studies involving 122 women found no significant differences between elective and selective C-section on outcomes.

Studies of Vaginal, Cesarean Deliveries Are a Wash

Trials often reach opposing results and have failed to compare elective C-section vs. planned vaginal birth.

BY JEFF EVANS
Senior Writer

PRAGUE — Neither elective cesarean section nor planned vaginal birth has yet been convincingly shown to provide the lower rate of perinatal and maternal complications in studies.

Most trials have not been randomized, have often reached opposing results, and have not compared elective C-section against planned vaginal birth, stymieing clinicians’ ability to conclude which may offer the least amount of risk to the newborn and mother, Dr. Ola Dinduk Saugstad said at the 20th European Congress of Perinatal Medicine.

Retrospective comparisons of elective repeat C-sections and trial of labor (prior to a repeat C-section) in term infants have alternately suggested that elective repeat C-section may increase an infant’s risk of respiratory problems, hyaline membrane, and a longer length of stay in the hospital (Pediatrics 1997;100:348-53), yet also confer a reduced risk of sepsis and an Apgar score of less than 6 at 1 minute.

Another study found no difference between the two delivery strategies in overall perinatal or maternal morbidity or mortality.

The odds ratios for late childhood mortality (5%) at up to 6 weeks of follow-up than those delivered by C-section (1.6%) (Lancet 2000;356:1375-83). But there was no difference in either maternal (Am. J. Obstet. Gynecol. 2004;191:917-27) or neonatal outcomes (Am. J. Obstet. Gynecol. 2004;191:864-71) after 2 years of follow-up, Dr. Saugstad said.

Results from the multicenter, randomized Term Breech Trial showed that vaginally born infants had a significantly lower birth weight, umbilical artery pH, and rectal temperature than vaginally delivered babies (Am. J. Perinatol. 2003;20:181-8).

Vaginally born infants tend to have lower rates of mechanical intervention, surfactant treatment, grade 3 or 4 intraventricular hemorrhage, necrotizing enterocolitis, or sepsis. But infants who were delivered by C-section had significantly lower birth weight, umbilical artery pH, and rectal temperature than vaginally delivered babies (Am. J. Obstet. Gynecol. 2004;191:864-71).

In a smaller retrospective study of extremely preterm infants who had a gestational age of less than 26 weeks at birth, significantly more neonates born vaginally survived than (21 of 27) than those born by C-section (9 of 21).

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Combined Spinal-Epidural Faster Than Continuous Epidural in PCA

BY SHARON WORCESTER
Southeast Bureau

H O L L Y W O O D, F L A. — The addition of spinal analgesia to a routine walking epidural patient-controlled analgesia regimen shortened the time to pain relief in a randomized study.

In the study of 136 patients who were randomized to receive a combined spinal-epidural (CSE) regimen or a routine epidural regimen, the CSE group achieved full analgesia satisfaction in a mean of 8 minutes, compared with 16 minutes in the epidural group.

Moreover, the addition of spinal analgesia did not affect the quality of the block, side effects, or patient satisfaction with analgesia, Dr. Shaul Cohen reported in a poster at the annual meeting of the Society for Obstetric Anesthesia and Perinatology.

Patients in the CSE group received initiation by 2mg of intrathecal ropivacaine and 5 mcg sufentanil via a PENCAN 2SG spinal needle followed by epidural patient-controlled analgesia (PCA). The epidural group received 20 mL of 0.04% ropivacaine plus 1 mcg/mL sufentanil plus 2 mcg/mL epinephrine epidural study solution followed by epidural PCA analgesia.

Pain scores in both groups were significantly decreased from baseline during the first and second stages of labor, number of patients able to ambulate, or APGAR scores, Dr. Balki noted.

Preterm Birth Diminishes Child’s Survival, Reproductive Capacity

BY SHARON WORCESTER
Southeast Bureau

M I AMI B E ACH — Individuals born preterm have diminished short- and long-term survival, as well as diminished reproductive capacity, and women born preterm are at increased risk of giving birth to their own offspring preterm, an analysis of data from a large birth registry suggests.

Data from about 610,000 men and 578,000 women entered into the Medical Birth Registry of Norway between 1967 and 1988 were analyzed and showed an overall rate of preterm birth of 5.7%, with 5.3% among females and 6.2% among males.

Those born preterm, compared with those born between 37 and 42 weeks’ gestation, had “considerably higher” perinatal and infant mortality, and the increased mortality risk persisted through adolescence, Dr. Geeta K. Swamy reported at the annual meeting of the Society for Maternal-Fetal Medicine.

The odds ratios for early childhood death in those born extremely preterm was 6.4 for males (no females died in late childhood in this group), and for those born very preterm they were 1.9 for males, and 0.9 for females, said Dr. Swamy of Duke University, Durham, N.C.

Reproduction was significantly diminished in both men and women born extremely preterm who survived until at least age 18 years (odds ratio 0.48 for men and 0.52 for women) and in those born very preterm who survived to at least age 18 years (odds ratio 0.75 for men and 0.81 for women).

The risk for having offspring born preterm was increased only among women who were born preterm.

Approximately 17% of those born extremely preterm gave birth prematurely, compared with 7% of those born at term.

The findings emphasize the increased need for health care and social services well beyond the neonatal and infant life periods,” Dr. Swamy said, adding that further study will analyze gender-specific rates of mortality to better determine how preterm birth affects long-term health.

A reevaluation to determine how compensation for preterm newborns who were delivered by C-section with labor. Correction for this and other risk factors made the difference in complications non-significant (Am. J. Obstet. Gynecol. 2003;189:501-6).

In a smaller retrospective study of extremely preterm infants who had a gestational age of less than 26 weeks at birth, significantly more neonates born vaginally survived than (21 of 27) than those born by C-section (9 of 21).

Vaginally born infants tend to have lower rates of mechanical intervention, surfactant treatment, grade 3 or 4 intraventricular hemorrhage, necrotizing enterocolitis, or sepsis. But infants who were delivered by C-section had significantly lower birth weight, umbilical artery pH, and rectal temperature than vaginally delivered babies (Am. J. Obstet. Gynecol. 2004;191:864-71). After 2 years of follow-up, Dr. Saugstad said.