

SELECTED ABSTRACTS

Pages with reference to book, From 213 To 215

Congenital Cytomegalovirus Infection; the Relative Importance of Primary and Recurrent Maternal Infection. Sergio Stagno, Robert F. Pass, Meyer E. Dworsky and others. N. Engl. J. Med., 1982,306: 945-949.

PRIMARY and recurrent infections with cytomegalovirus in pregnant women were studied. One-half of congenital cytomegalovirus infections in neonates resulted from recurrent maternal infections. Infants who had the infection develop as a result of primary maternal infection were much more likely to have clinically apparent disease, as did five of 33 infected infants, than those born to mothers with recurrent disease; none of the 27 infants born to mothers with recurrent disease had clinically apparent disease. Women of higher socioeconomic status were more likely to have primary infection than those of lower income groups, among whom recurrent infection was much more common. Cytomegalovirus is the most common congenital viral infection, occurring in 1 per cent of live births. Up to 20 percent of infected infants can be expected to suffer permanent sequelae, including fatal illness, hepatosplenomegaly and neurologic and behavioral complications.

Janice B. Asher

Maternal Obesity in Pregnancy. Claude Calandra, David A. Abell, and Norman A. Beischer. Obstet. Gynecol., 1981,57:8-12.

THREE HUNDRED AND SIXTY-FIVE of 6,495 pregnant women at term, 5.6 per cent, weighed over 90 kgm. Among these obese patients, there was a significant increase in the incidence rate of hyperglycemia, 16.9 per cent hypertension, 43.6 per cent, and subnormal urinary estriol excretion, 18.6 per cent. A twofold increased incidence of infants weighing 4,000 gm, or more at birth was found in the obese group, but increased fetal size was not because of the associated maternal hyperglycemia. This increased size did not increase the cesarean section rate, although five multiparas had obstructed labor. Problems of management in labor, including an increased incidence of prolonged labor after amniotomy, primary postpartum hemorrhage, puerperal pyrexia and neonatal asphyxia, are emphasized. No maternal deaths occurred in this series, and perinatal mortality was not increased. The results of this study indicate that, when prenatal care includes monitoring of glucose tolerance and fetoplacental function, as well as consideration of cephalopelvic disproportion, obesity is not associated with less favorable maternal or perinatal results.

Fred J. Duboe

Physician Bias in Cesarean Section. Robin N. Phillips, John Thornton and Norbert Gleicher. J A.M.A., 1982, 248: 1082-1084.

A STUDY was designed to investigate the bias of physicians in making the decision of whether or not to perform a cesarean section for different indications and the distribution of these indications according to the day of the week. No difference in the distribution of nonelective cesarean section indications was found between weekdays and weekends. There were significant changes in indications for cesarean section between the two years investigated—changes that may reflect the organizational change in the department. The significant changes in indications for cesarean section were an increase in those of dystocia and breech presentation and a decrease in fetal distress and miscellaneous indications. It is suggested that modern obstetric practice per se does not increase the rate of cesarean sections but that it may have shifted the distribution of indications for cesarean section.

Morteza M. Dini

Risk Factors Associated with Infection Following Cesarean Section. P.A. Hawrylyshyn, P. Bernstein and F.R.Papsin. Am. J. Obstet. Gynecol., 1981, 139: 294.

THE AUTHORS set out to identify various risk factors which predispose to postoperative febrile morbidity, particularly endometritis. Multivariant discriminant analysis was used in this retrospective study of 496 deliveries. Two hundred and fifty of these deliveries were vaginal, and 246 were cesarean sections. Infection rates for endometritis by type of delivery were: vaginal, 3.6 per cent; elective repeat cesarean section, 6.0 per cent; emergency cesarean section, 38.4 per cent, and nonurgent primary cesarean section, 22.2 per cent. Bacterial isolates involved were most often *Staphylococcus aureus*. No risk factors related to the patient were identified for elective repeat cesarean section, but four statistically significant risk factors were associated with the occurrence of endometritis after primary cesarean section. These consisted of increasing order of importance; the duration of labor; the number of preoperative vaginal examinations; the length of time membrane were ruptured prior to delivery, and anemia after operation. It is noted that internal fetal monitoring was not a risk factor. The clinical relevance of these findings to the use of prophylactic antibiotics and other steps taken to decrease postoperative morbidity is discussed.

Fred .J. Duboe

Respiratory Distress Following Elective Repeat Cesarean Section. Richard L. Schreiner, Dennis L. Stevens, Wilbur L.s Smith and others. Am. J. Obstet. Gynecol., 1982, 143: 689-692.

THIS RETROSPECTIVE STUDY from the University of Indiana was designed to determine the etiologic factors of respiratory distress in 47 infants born by elective repeat cesarean sections. The data suggest that some of the respiratory distress subsequent to elective repeat cesarean section is not secondary to iatrogenic delivery of a premature infant. Respiratory distress in these patients does not imply poor prenatal care in regard to the timing of delivery. Thirty per cent of the infants were diagnosed as more than or equal to 38 weeks gestation by menstrual history and by results of both obstetric and pediatric examination.

Sixty per cent of the neonates with respiratory distress did not have hyaline membrane disease. Many of the patients had clinical signs and symptoms compatible with persistent fetal circulation. It is also suggested that, regardless of the primary etiologic factor, much of the respiratory distress associated with elective repeat cesarean section might be prevented if the mothers were allowed to begin labor spontaneously before cesarean section was performed.

David W. Cromer

Ultrasonic Prediction of Fetal Macrosomia in Diabetic Patients. John P. Elliott, Thomas J. Garite, Roger K. Freeman and others. Obstet. Gynecol., 1982, 60: 159-162.

SEVENTY PATIENTS with diabetes were delivered of neonates between September 1976 and September 1980 and were studied retrospectively. All patients had an ultrasonographic examination before delivery. An attempt was made to predict macrosomatia, which is defined as a fetal weight greater than 4,000 grams in the patient with diabetes by the use of an ultrasonic measurement of the biparietal diameter and the chest diameter. Twenty-three infants with macrosomatia, 32.8 per cent, were identified in this group. In this study, the patients were classified for diabetes according to White, from class A to R. A macrosomatia index was calculated, and in this study, 87 per cent of the infants who weighed more than 4,000 grams had a chest and biparietal diameter of 1 .4 centimeter or more. Thirty-four of 37 patients who weighed less than 4,000 grams had a chest and biparietal diameter of 1 .3 centimeters or less.

Fifteen patients were delivered vaginally, four of the deliveries were complicated by shoulder dystocia, two of the infants had Erb's palsy, one infant had a fractured humerus and another infant had severe neonatal asphyxia. No cesarean sections were performed in this group of patients; however, three of four patients had shoulder dystocia that might have been avoided if the patient had been delivered by

cesarean section.

William f. Peeples

Clostridia Isolated from the Feces of Infants During the First Year of Life. P.L. Stark and Adrian Lee. J. Pediatr., 1982, 100: 362-365.

FEW QUALITATIVE DATA are available upon the species of Clostridium inhabiting the gastrointestinal tract of infants. In this study, the Clostridium species isolated from the feces of ten healthy infants in their first year of life is identified.

In the formula-fed infants, colonization occurred consistently throughout the year, whereas in some breast-fed infants, colonization was inhibited until weaning. It was demonstrated that those species of Clostridium which have been implicated in the etiologic factors of neonatal necrotizing enterocolitis form part of the normal gastrointestinal microflora of normal infants. Several of the species found are rare in adults. The reason for this selection of clostridial species is unknown, but these preliminary data may lead to a better understanding of a variety of clostridial infections of the gastrointestinal tract.

David W. Cromer