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Omphalocele—is it as bad as we think?

► Omphalocele is a rare malformation (1 in 4000–10,000 deliveries) that is often associated with chromosomal anomalies or other major congenital anomalies. The perinatal mortality rate is approximately 30%. These researchers reviewed neonatal outcomes in all cases of omphalocele with a normal karyotype at a single institution between 1988 and 2001.

Thirty-six cases were reviewed; all but one were diagnosed prenatally by ultrasound. There were seven deaths: two intrauterine and five neonatal; the neonatal deaths were associated with other major anomalies. In all, there were 11 neonates in whom other major congenital anomalies were identified; 9 were diagnosed prenatally. There were seven cases of significant heart disease, four central nervous system defects, three genitourinary defects, four gastrointestinal anomalies, and one case of cleft palate. All five neonatal deaths occurred among the 11 infants with associated major congenital anomalies, whereas no deaths occurred among the 25 infants without such anomalies, a significant difference. Of 21 infants who were delivered by cesarean section, 90% had an extracorporeal liver. The authors conclude that their study provides additional evidence that outcomes in infants with omphalocele are improving and that mortality rates are low if there are no other major anomalies or genetic defects.

Comment ► Although this report is optimistic regarding the outcome of karyotypically normal neonates with omphalocele, it emphasizes the impact of other congenital anomalies. It is worth noting that all but one infant's defects were diagnosed prenatally, and all infants were delivered at a tertiary care center. Congenital anomalies are now the single leading cause of infant mortality, and any strategy to reduce the rate of mortality associated with these anomalies must include delivery at centers that are equipped to deal with such problems (including careful genetic review to rule out syndromes with a high recurrence risk).

William P. Kanto, Jr., MD

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▲ Heider AL *et al.* Omphalocele: clinical outcomes in cases with normal karyotypes. *Am J Obstet Gynecol* 2004;190:135–41.

Corticosteroids for respiratory distress syndrome may be harmful

► Corticosteroids may improve lung function in premature infants with lung disease, but they may also adversely affect cognitive development. Investigators in Taiwan conducted a follow-up study of 146 school-age children (mean age, 8 years) who had received dexamethasone or placebo as premature infants in a randomized clinical study of severe respiratory distress syndrome requiring mechanical ventilation.

On numerous neuromotor, cognitive, and school-performance tests, children who had received dexamethasone did significantly worse than those who had received placebo. For example, the mean full-scale IQ was 78.2 in the dexamethasone group and 84.4 in the placebo group. Clinical disability (i.e., cerebral palsy, poor visual acuity, cognitive delay, or hearing impairment) was significantly more common in the dexamethasone group than in the placebo group (39% vs. 22%). In addition, the mean heights of both girls and boys were significantly lower in the dexamethasone group.

Comment ► These data confirm and extend the results of various systematic reviews suggesting that postnatal corticosteroids adversely affect cognitive development when used to treat premature infants with lung disease. An editorialist notes that much of the confusion about the role of postnatal steroids comes from uncertainty about which drug is the best (betamethasone might be a better choice than dexamethasone) and about the proper dose and timing of administration. Regardless, dexamethasone clearly should not be used routinely for treating lung disease in premature infants.

Howard Bauchner, MD

Published in *Journal Watch Pediatrics and Adolescent Medicine*
April 12, 2004

▲ Yeh TF *et al.* Outcomes at school age after postnatal dexamethasone therapy for lung disease of prematurity. *N Engl J Med* 2004;350:1304–13.

▲ Jobe AH. Postnatal corticosteroids for preterm infants—Do what we say, not what we do. *N Engl J Med* 2004;350:1349–51.

Yet another reason why breast is best

► Ample evidence shows that breast-feeding improves the overall health of infants, and data suggest that the child may reap long-term cardiovascular benefits. To investigate the association between breast-feeding and later blood pressure (BP), these authors evaluated 7276 children participating in a long-term follow-up study in the U.K. In this analysis, term singleton infants born in 1991 or 1992 were evaluated at age 7.5 years. The children were classified by infant-feeding status into three groups: those who were never breast-fed, those who were breast-fed exclusively, and those who were partially breast-fed. Duration of breast-feeding was also evaluated for its effect on BP.

The mean systolic pressure of breast-fed infants was 1.2 mm Hg lower (CI, 0.5 to 1.9) than that of infants never breast-fed, and the mean diastolic pressure was 0.9 mm Hg lower (CI, 0.3 to 1.4). The decrease in mean BP was similar whether or not breast-feeding was exclusive at 2 months of age. The authors found a mean 0.2-mm-Hg reduction in BP with each 3-month period of breast-feeding. They conclude that term infants who are breast-fed have lower BP at age 7 and speculate that the association will become stronger when the children reach adolescence.

Comment ► No one disputes the short-term advantages of breast-feeding, but we now see that the benefits may be lifelong. More information is required to establish causality and define mechanisms, but enough information exists for pediatricians to actively promote breast-feeding and provide informed counsel to breast-feeding families. Although the reductions in the mean pressures appear modest, they are important and can translate into improvement in group health and reduced morbidity.

William P. Kanto, Jr., MD

Published in *Journal Watch Pediatrics and Adolescent Medicine*
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▲ Martin RM *et al.* Does breast-feeding in infancy lower blood pressure in childhood? The Avon Longitudinal Study of Parents and Children (ALSPAC). *Circulation* 2004;109:1259–66.

Kicking the habit cough: teaching kids self-hypnosis ►

Habit cough (i.e., psychogenic cough or cough tic) is characterized by a recurrent barking or honking sound that temporarily ceases with sleep and distractions. The cough may be triggered by an organic disease (e.g., urinary tract infection, asthma, or gastrointestinal esophageal reflux disease [GERD]) or a behavioral condition (e.g., anxiety, social or academic stress).

These authors performed a retrospective review of 56 patients (mean age, 10.7 years) with habit cough to study the effect of self-hypnosis in a pediatric clinical setting. Average duration of cough at presentation was 13 months; the cough occurred throughout the day in 93% of patients. Habit cough was diagnosed after referral to a pediatric pulmonary specialist. Coexisting diagnoses included asthma (20%), GERD (16%), conversion disorder (11%), and irritable bowel syndrome (9%). Social, educational, and family stressors were common.

All patients received instruction in self-hypnosis for relaxation, with a suggestion to ignore the cough-triggering sensation. A variety of self-hypnosis techniques were used: self-induction, relaxation imagery, and picking a gesture to cue a relaxation response. Fifty-one patients agreed to the treatment and were

instructed to practice the techniques daily for at least 2 weeks. The cough resolved during or immediately after the initial instruction session in 78% and within 1 month in an additional 12%. During an average follow-up of 13 months, the cough recurred one to three times in 11 patients, but it resolved in 10 of them after repeated self-hypnosis.

Comment ► Despite its retrospective design and the absence of a control group, this study supports the usefulness of self-hypnosis for treating chronic habit cough in children and adolescents and extends the literature documenting the benefits and safety of various progressive relaxation and mental imagery techniques (Olness K and Kohen DP. *Hypnosis and hypnotherapy with children*, 3rd ed. New York: The Guilford Press, 1996). This valuable therapeutic modality is taught at a workshop presented annually by the Society for Developmental and Behavioral Pediatrics.

Martin T. Stein, MD

Published in *Journal Watch Pediatrics and Adolescent Medicine* March 29, 2004

▲ Anbar RD, Hall HR. Childhood habit cough treated with self-hypnosis. *J Pediatr* 2004;144:213–17.