Clippings

- In January 2005, a tetravalent meningococcal polysaccharide-protein conjugate vaccine ([MCV4] Menactra, manufactured by Sanofi Pasteur, Inc., Swiftwater, Pennsylvania) was licensed for use among persons aged 11-55 years. CDC Advisory Committee on Immunization Practices (ACIP) recommends routine vaccination of young adolescents (defined in this report as persons aged 11-12 years) with MCV4 at the preadolescent healthcare visit (at age 11-12 years). Introducing a recommendation for MCV4 vaccination among young adolescents might strengthen the role of the preadolescent visit and have a positive effect on vaccine coverage among adolescents. For those persons who have not previously received MCV4, ACIP recommends vaccination before high-school entry (at approximately age 15 years) as an effective strategy to reduce meningococcal disease incidence among adolescents and young adults. By 2008, the goal will be routine vaccination with MCV4 of all adolescents beginning at age 11 years. (MMWR Recomm Rep 2005 May 27;54(RR-7):1-21.)
- Omitting radiotherapy for central nervous system (CNS) prophylaxis has improved the overall quality of life for long-term survivors of childhood acute lymphoblastic leukemia (ALL). However, recent reports suggest minor cognitive impairment in survivors who received chemotherapy only. This study focused on attentional functioning and speed of information processing in 23 children previously treated for ALL according to EORTC 58881 and EORTC 58951 protocol. Patients received intrathecal methotrexate combined with high doses intravenous methotrexate as CNS prophylaxis. Cognitive functioning was assessed with the Amsterdam Neuropsycho-

logical Tasks, a computerized attention assessment program. Patients were equal to control children concerning baseline speed, sustained attention, response inhibition, and response organization. However, they were significantly slower than controls in three tasks: encoding, memory search letters, and focused attention 4-letters. ALL survivors treated with chemotherapy have specific information processing difficulties. They process information slower than control children, especially when more information has to be processed or when attention has to be focused precisely. (Pediatr Blood Cancer 2005; 44: 478-486.)

- A nested case-control study was conducted to examine the association between asthma and invasive pneumococcal disease. The study population included persons 2 to 49 years of age who were enrolled in Tennessee's Medicaid program (TennCare) for more than one year during the study period (1995 through 2002) and who resided in counties participating in a prospective laboratory-based program of surveillance for invasive pneumococcal disease. A total of 635 persons with invasive pneumococcal disease and 6350 controls were identified, of whom 114 (18.0 percent) and 516 (8.1 percent), respectively, had asthma. Persons with asthma had an increased risk of invasive pneumococcal disease (adjusted odds ratio, 2.4; 95 percent confidence interval, 1.9 to 3.1) as compared with controls. Asthma is an independent risk factor for invasive pneumococcal disease. The risk among persons with asthma was at least double that among controls. (N Engl J Med 2005; 352: 2082-2090).
- ☐ While gluten ingestion is responsible for the signs and symptoms of celiac disease, it is not known what factors are associated with

initial appearance of the disease. This study examines whether the timing of gluten exposure in the infant diet was associated with the development of celiac disease autoimmunity (CDA). This study was conducted in Denver, from 1994-2004 on 1560 children at increased risk for celiac disease or type 1 diabetes, as defined by possession of either HLA-DR3 or DR4 alleles, or having a first-degree relative with type 1 diabetes. Risk of CDA was defined as being positive for tissue transglutaminase (tTG) autoantibody on 2 or more consecutive visits or being positive for tTG once and having a positive small bowel biopsy for celiac disease. Findings adjusted for HLA-DR3 status indicated that children exposed to foods containing wheat, barley, or rye (gluten-containing foods) in the first 3 months of life (3 [6%] CDA positive vs 40 [3%] CDA negative) had a 5fold increased risk of CDA compared with children exposed to gluten-containing foods at 4 to 6 months. Timing of introduction of gluten into the infant diet is associated with the appearance of CDA in children at increased risk for the disease. (JAMA 2005; 293: 2343-2351.)

Ring chromosome 20 (r[20]) syndrome is characterized by mild to moderate learning disability, behavioral disorders, epilepsy, and various dysmorphic features. Although still considered rare, r (20) syndrome is being increasingly diagnosed. More than 30 cases have been described in the literature since 1976. Here an additional case of a 14-year-old male with r (20) is described. He had moderate to severe learning disability and epileptic seizures manifesting at about 18 months of age. During the 13 years' follow-up period he showed intractable epileptic seizures, behavioral disorders, and mild dysmorphological features including microcephaly, strabismus, micrognathia, down-slanting eyelids, and ear abnormalities. Frequent episodes of atypical absence

or non-convulsive status associated with electroencephalogram changes were seen in follow-up. He was treated with several classical and new antiepileptic drugs with unsuccessful control of seizures. Aggressiveness, compulsiveness with self-injury, and panic attacks developed at the age of 13 years, and were more pronounced after callosotomy. This case report provides the first description of deterioration in psychological situation in patients with r(20) intractable epilepsy. The patient was diagnosed with r(20) syndrome after 13 years of clinical follow-up. Karyotype analysis should, therefore, be performed in every patient with intractable epilepsy of unknown etiology. (Dev Med Child Neurol 2005; 47: 3 43-346).

This study aimed to determine whether neonatal feeding performance can predict the neurodevelopmental outcome of infants at 18 months of age. The expression and sucking pressures of 65 infants (32 males and 33 females, mean gestational age 37.8 weeks [SD 0.5]; range 35.1 to 42.7 weeks and mean birthweight 2722g [SD 92]) with feeding problems were measured and their neurodevelopmental outcome at 18 months of age was assessed. Their diagnoses varied from mild asphyxia and transient tachypnea to Chiari malformation. A neurological examination was performed at 40 to 42 weeks postmenstrual age by means of an Amiel-Tison examination. Feeding performance at 1 and 2 weeks after initiation of oral feeding was divided into four classes: class 1, no suction and weak expression; class 2, arrhythmic alternation of expression/suction and weak pressures; class 3, rhythmic alternation, but weak pressures; and class 4, rhythmic alternation with normal pressures. There was a significant correlation between feeding assessment and neurodevelopmental outcome at 18 months. Improvements of feeding pattern at the second evaluation resulted in better neurodevelopmental outcome. Neonatal feeding performance is, therefore, of prognostic value in detecting future developmental problems. (Dev Med Child Neurol 2005; 47: 299-304).

The primary purpose of this study was to describe the proportion of low birth weight that could be potentially prevented by programs focusing on maternal prepregnant body mass index (BMI) and/or weight gain during pregnancy. In this historic cohort design, study data consisted of birth certificates linked to the Pregnancy Risk Assessment Monitoring System for South Carolina resident women delivering in South Carolina during 1998 and 1999. The analysis was performed using SUDAAN to accommodate the analysis weight and extrapolate the sample data to the South Carolina state population. Eight percent of the very low

birth weight (VLBW) rate in South Carolina can be attributed to inadequate weight gain in pregnancy. Approximately 19% of the state's VLBW rate can be attributed to either underweight or overweight BMI at conception. Women with less than adequate weight gain were 1.4 times more likely to deliver a VLBW baby and 1.9 times more likely to deliver a moderately low birth weight baby as compared with women with adequate weight gain. Appropriate maternal BMI at conception followed by adequate weight gain during pregnancy may have a substantial influence on reducing the number of low birth weight deliveries. (South Med J 2005; 98: 411-415).

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