Infliximab treatment for Kawasaki disease

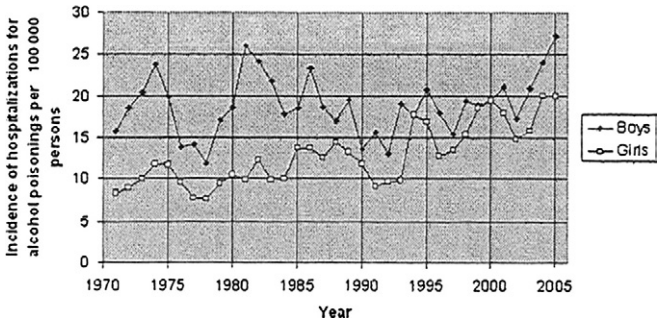
Intravenous immunoglobulin (IVIG) has been shown by randomized controlled clinical trials to be an effective treatment for Kawasaki disease. Unfortunately, IVIG is not successful in all cases. Because tumor necrosis factor-alpha (TNF-alpha) is often elevated in patients with acute Kawasaki disease, it is possible that TNF-alpha blockade also could be a useful treatment. In this issue of *The Journal*, Burns et al present the results of a randomized controlled clinical trial of a second infusion of IVIG versus treatment with infliximab in children with Kawasaki disease who were resistant to a first dose of IVIG. They found that in most patients, both treatments were safe and led to cessation of fever within 24 hours. Further research is needed, but infliximab might be considered as an alternative to additional infusions of IVIG or treatment with corticosteroids when a first dose of IVIG is unsuccessful in the treatment of Kawasaki disease.

—Stephen R. Daniels, MD, PhD
page 833

Increasing rate of acute alcohol poisoning among Finnish youth

Kivistö et al from the University of Tampere have studied the epidemiology of poisonings in children and adolescents living in Finland during the period 1971 to 2005. Overall, there was a decrease in the incidence of hospitalizations, particularly in the age group of 0 to 4 years (51% decrease). However, this good news was offset by an increase in hospitalizations for acute alcohol poisoning, particularly among teenagers. Prevention programs should be targeted at reducing alcohol consumption and alcohol-related poisonings among teenagers in Finland.

—Robert W. Wilmott, MD
page 820



Pneumococcus and influenza: always more to learn

In this issue of *The Journal*, two studies from the Netherlands, where policies for pneumococcal and influenza vaccines are narrowly focused, remind us that we still can learn more about natural history, impact, and prevention of disease due to influenza and pneumococci—and how their stories are entwined.

It is current policy in the Unites States that all children 2 months through 59 months of age should receive pneumococcal conjugate vaccine (PCV7), and policy is being advanced that all children 6 months through 18 years of age should receive influenza vaccine annually. The policies rest on prevention of substantial morbidity due to pneumococcal and influenzal disease in the age groups targeted, as well as compelling information that children are important sources of these infections for the community.

The study by Jansen et al is noteworthy in at least 3 ways: 1) It is a double blind, placebo-controlled trial in which children were randomized into one of three study groups to receive either PCV7 + trivalent inactivated influenza vaccine (TIV), TIV + placebo, or hepatitis B vaccine + placebo; 2) The study was performed in pre-school aged children (enrolled at 18 to 72 months of age); and 3) The majority of children were followed over two influenza seasons, with the primary endpoint of febrile acute respiratory tract illnesses (RTIs).

With all caveats of a selected population, incomplete follow-up and investigation of illness episodes, and absence of a PCV7 plus placebo group, results support effects of influenza vaccinations (even during seasons of mismatched vaccine and circulating strains) and probable additional effects of PCV7 for the primary outcome (although the authors do not conclude this about RTIs and conclude the opposite for a secondary outcome—acute otitis media). The article deserves careful reading and adds substantially to the evidence base for vaccination of pre-school aged children.

The study by Labout et al on nasopharyngeal colonization with *Streptococcus pneumoniae* is prospective, longitudinal, serotype-specific, and population-based. Also, it was performed just prior to introduction of the PCV7 program. The investigators found that nasopharyngeal colonization with PCV7 serotypes (those serotypes also most likely to lead to disease) increased through infancy (speculated to result from decreasing maternal antibody with age) and was associated with number of siblings and attendance at out-of-home daycare (speculated to represent exposure opportunities).

—Sarah S. Long, MD
page 764 (Jansen)
page 771 (Labout)