Rotavirus Vaccine Benefit Outweighs Small Risk

BY MIRIAM E. TUCKER
FROM A MEETING OF THE CDC'S ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES

ATLANTA – New data on the rotavirus vaccine suggest a slightly increased risk for intussusception following the first dose, but consensus among experts remains that in most cases the vaccine’s benefits outweigh the possible risk.

At the meeting, speakers summarized postmarketing surveillance data from Mexico, Brazil, Australia, and the United States for Merck’s Rotarix and GlaxoSmithKline’s RotaTeq. Taken together, the data suggest that the excess risk for intussusception is approximately 1 per 97,000 infants following a first dose of rotavirus vaccine given at 6-14 weeks of age.

Data Source: Several different sources, including the CDC, Merck, and GlaxoSmithKline.

Disclosures: Dr. Cortese and Dr. Baggs are CDC employees and do not have financial disclosures.

Major Finding: The excess risk for intussusception is approximately 1 per 97,000 infants following a first dose of rotavirus vaccine given at 6-14 weeks of age.

Data Source: Several different sources, including the CDC, Merck, and GlaxoSmithKline.

Disclosures: Dr. Cortese and Dr. Baggs are CDC employees and do not have financial disclosures.

Cost of Hospital Stay Up 102% for Viral Infections, 91% for Bacterial Infections

D espite 2005 recommendations that people aged 10-64 years receive the tetanus, diphtheria, and acellular pertussis (Tdap) vaccine every 10 years, vaccination rates remain suboptimal, according to researchers from the Centers for Disease Control and Prevention.

In 2008, just 5.9% of adults aged 18-64 years were estimated to have received the Tdap vaccine. Tdap vaccination rates were higher for health care personnel – 15.9% – than for adults who have contact with infants – 5.0%. And for adults in this age range for whom Tdap vaccination history could be determined, 36.5% were overdue for a tetanus booster shot, which the Tdap vaccine would now replace.

These findings are especially alarming given the recent spike in the number of pertussis cases across the United States, and they underscore the need for more aggressive vaccination efforts, the researchers reported.

The analysis from data of the National Health Interview Survey showed that about 62% of adults aged 18-64 years reported having been vaccinated against tetanus in the previous 10 years in 2008, and 60% reported having updated vaccinations in 1999 (MMWR 2010;59:1302-6).

The Advisory Committee on Immunization Practices that made the 2005 Tdap recommendations suggested that the vaccine may be used to provide protection against infection with pertussis.

It is particularly important for health care personnel and adults who have contact with infants to be vaccinated against pertussis, because they are at higher risk for transmitting the illness to susceptible groups.

While tetanus infections are rare in the United States, pertussis is considered a common illness, according to the CDC. In 2008, 13,278 cases of pertussis were reported in the United States, although that is likely to be an underestimate given that the illness typically has nonspecific symptoms and often isn’t properly diagnosed. Infants less than age 6 months who have contact with infants younger than age 1 year, the interval between the last tetanus shot and a new Tdap vaccine can be as little as 2 years.