Features Differ in Sinogenic Intracranial Infections

BY DOUG BRUNK
San Diego Bureau

SAN DIEGO — Children with intracranial complications of sinusitis are significantly older, and have longer hospitalizations and more neurologic sequelae, compared with children who have intraorbital complications of sinusitis, Dr. Veronica K. Goytia reported at the annual meeting of the Infectious Diseases Society of America.

Recognition of clinical features suggestive of either intraorbital extension or intracranial extension is critical to initiating medical and surgical interventions that optimize outcome, said Dr. Goytia, a pediatric infectious diseases fellow at Baylor College of Medicine and Texas Children’s Hospital, both in Houston.

In a study that is among the largest of its kind, Dr. Goytia and her mentors, Dr. Carol J. Baker and Dr. Morven S. Edwards, described the features of illness in 58 children under the age of 18 years who were admitted to Texas Children’s Hospital with sinusitis complicated by intraorbital and/or intracranial extension from 1997 through 2006.

They defined sinusitis as paranasal sinus opacification on diagnostic imaging performed within 72 hours of admission. Intraorbital extension (IOE) was defined as an infection within or involving the bony confines of the orbit, whereas intracranial extension (ICE) was defined as an infection of sinusitis beyond the confines of the sinuses and orbit.

Of the 58 children, 26 had IOE and 32 had ICE. Intracranial complications consisted of dural enhancement (17 patients), subdural empyema (15), epidural abscess (14), frontal bone osteomyelitis (9), brain abscess (4), and sinus thrombosis (1). Some patients had more than one complication.

Children with ICE were significantly older than children with IOE (a mean of 11 years vs. 6 years, respectively). There was no difference in ethnicity between the two groups, and males outnumbered females by nearly two to one.

Prior to hospital admission, a majority of children with IOE had been seen by their primary care physicians, whereas children with ICE were more likely to have come to a community hospital for evaluation, and had significantly more preadmission encounters than [did] those with IOE,” Dr. Goytia said.

There were no significant differences between the ICE and IOE groups in history of allergic rhinitis, dental surgery, otitis media, or trauma, but children in the ICE group were more likely than their IOE counterparts to have a history of acute or chronic sinusitis.

A cranial CT scan of a 12-year-old patient shows orbital abscess (red arrow) in the setting of ethmoid and sphenoid sinusitis.

The most common presenting features for both groups were fever, headache, and vomiting. There were no differences between groups in the level or duration of fever, but children in the ICE group were... Continued on following page

Kids Need Flu Vaccine, Too!

Influenza immunization is so important that 25 of the nation’s leading groups have gotten behind it. The Childhood Influenza Immunization Coalition urges you to vaccinate children and their contacts throughout the influenza season. By the way, health care workers need immunization, too.

www.PreventChildhoodInfluenza.org

This is a message from the Childhood Influenza Immunization Coalition members:

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- American Academy of Pediatrics
- American College of Cardiology
- American College of Obstetricians and Gynecologists
- American Lung Association
- American Medical Association
- American Public Health Association
- Asian and Pacific Islander American Health Forum
- Association of State and Territorial Health Officials
- Asthma and Allergy Foundation of America
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- National Association for the Education of Young Children
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- National Association of Pediatric Nurse Practitioners
- National Association of School Nurses
- National Foundation for Infectious Diseases
- National Hispanic Medical Association
- National Medical Association
- Parents of Kids with Infectious Diseases
- Society for Adolescent Medicine
Survey: RotaTeq Use Varies per Years in Practice

BY DOUG BRUNK
San Diego Bureau

SAN DIEGO — Pediatric clinicians who have been in practice for less than 10 years were more likely to recommend the RotaTeq vaccine for routine childhood immunization compared with their counterparts who have been in practice for more than 10 years, results from a small survey suggest.

“We hypothesize that this may be due to the previous experience with Rotashield and its withdrawal from the market in 1999 due to intussusception,” Dr. Lara Jacobson said in an interview during a poster presentation given at the annual meeting of the Infectious Diseases Society of America.

In February 2006, the U.S. Food and Drug Administration approved RotaTeq (human-bovine pentavalent reassortment vaccine) as a rotavirus vaccine. In August 2006, the Advisory Committee on Immunization Practices (ACIP) recommended RotaTeq for routine childhood immunization.

In an effort to measure acceptance of the RotaTeq vaccine, Dr. Jacobson’s associate, Dr. Aaron M. Milstone, administered a survey to 120 pediatricians, family physicians, and nurse practitioners while they were attending a continuing medical education conference at Johns Hopkins Hospital, Baltimore, in April 2007.

Of the 105 clinicians who completed the survey, 84% agree with ACIP’s recommendations for routine administration, 86% inform their patients of the vaccine, and 88% recommend the vaccine to their patients, reported Dr. Jacobson of the department of pediatrics at Johns Hopkins University.

All clinicians who had been in practice for less than 10 years reported recommending the vaccine to their patients, compared with 81% of those in practice for more than 10 years, a difference that was statistically significant.

“I was surprised by the strength of this difference,” Dr. Jacobson said. “That would be hundreds of thousands of vaccines that are not being prescribed per year in a very specific demographic of pediatricians.”

One of the study’s coauthors, Dr. Mathuram Santosham, was a principal investigator on a RotaTeq vaccine safety and efficacy trial funded by Merck Sharp & Dohme.

Dr. Milstone and Dr. Jacobson stated that they had no relevant financial relationships to disclose.