

# Pediatric Myositis, Pyomyositis May Be Increasing

BY SHERRY BOSCHERT  
San Francisco Bureau

SAN FRANCISCO — An increase in community-acquired methicillin-resistant *Staphylococcus aureus* over the past 5 years was accompanied by an increase in myositis and pyomyositis in children at one hospital, reported Dr. Pia S. Pannaraj.

Until recently, infective pyomyositis primarily was a tropical disease and affected only 1 in every 300,000-400,000 U.S. hos-

pital admissions. Published reports of acute bacterial myositis were less common than pyomyositis and mainly described disease in adults, not children. Acute bacterial myositis moves beyond distinct abscesses within the muscle to extend inflammation through one or more muscle groups.

A review of records at Texas Children's Hospital, Houston, for the 5-year period 2000-2004 found 96 cases of infective bacterial myositis in children who had no un-

derlying condition. *S. aureus* caused 66 of these infections, she said at the annual meeting of the Infectious Diseases Society of America.

"It's important to know that myositis ... is not as rare as people once thought. At least, we're seeing more cases of it. It correlates with the increase in *Staph aureus*" acquired in the community, Dr. Pannaraj of Baylor College of Medicine, Houston, said in an interview at her poster presentation.

In all, 38 (58%) of the 66 cases due to *S. aureus* were community-acquired methicillin-resistant *S. aureus* (MRSA), and 28 (42%) were due to community-acquired methicillin-sensitive *S. aureus* (MSSA).

The frequency of infective bacterial myositis cases increased from 10 cases in 2000 to 36 cases in 2004 at Dr. Pannaraj's institution. Most of the increase came from community-acquired MRSA. Frequencies of other isolates did not change significantly over time.


Children with muscular disease due to MRSA had a more severe course of illness than did children with MSSA. Those with MRSA had longer fevers, larger abscesses, higher white blood cell counts, higher C-reactive protein levels, higher erythrocyte sedimentation rates, greater need for muscle drainage, and greater sequelae necessitating physical therapy.

"There's definitely something there in terms of the virulence factors" with MRSA, Dr. Pannaraj said. "We're trying to figure out what that is."

Other etiologies of the muscular infections were group A *Streptococcus* in six patients, group C *Streptococcus* in one patient, and *Haemophilus influenzae* in one patient. Bacteria were not isolated in the rest of the cases.

Bacterial etiologies did not differ significantly between cases of myositis or pyomyositis. ■

## NOW AVAILABLE

SYNAGIS®  
PALIVIZUMAB   
LIQUID  
SOLUTION

- No need for reconstitution
- Single-use vial

www.synagis.com


Synagis® is a registered trademark of MedImmune.

 MedImmune

Gaithersburg, MD 20878

Customer Support Network: 1-877-633-4411

©2005 MedImmune

 ROSS ROSS PRODUCTS DIVISION  
ABBOTT LABORATORIES INC.  
COLUMBUS, OH 43210-1724 USA

SSP05-130

Printed in USA

## Flu Shots Are Key for Children With NNMD

Flu shots are de rigueur for children with neurologic and neuromuscular diseases given their high risk of influenza-related respiratory failure.

"Children with pulmonary disease, cardiac disease, or NNMD [neurologic and neuromuscular disease] had approximately a 10% probability of respiratory failure" during a hospitalization for influenza, Dr. Ron Keren and his colleagues reported. "Having two of the three chronic conditions increased the probability another three- to fourfold" (JAMA 2005;294:2188-94).

Dr. Keren, of the Children's Hospital of Philadelphia, and his associates examined rates of respiratory failure in 745 children and adolescents (aged 21 years and younger) in 2000-2004. Eighty-nine (12%) had an NNMD, most commonly cerebral palsy (40%), seizure disorders (42%), and hydrocephalus/cerebrospinal fluid shunt (30%).

During the study period, 32 children developed respiratory failure; 14 of those had an NNMD, a sixfold increased risk, compared with those with no chronic health problem.

This risk was higher than that associated with pulmonary disease (OR 5.0) or cardiac disease (OR 4.0), both of which are accepted indications for an annual childhood influenza vaccine.

—Michele G. Sullivan