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News

MRSA Colonization Uncommon in Daycare Setting

28 October 2008 (Reuters Health [Anthony J. Brown])—New research suggests that colonization with methicillin-resistant *Staphylococcus aureus* (MRSA) is relatively uncommon among children and workers at daycare centers. However, when a child or worker is colonized, there is a good chance that their family members will be carrying the microbe as well.

In the study, just 6.7% of children, 3.1% of employees, and 2.1% of environmental samples were colonized with MRSA, according to the findings, which were presented at the combined annual meeting of the Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) and the Infectious Diseases Society of America (IDSA) in Washington, DC.

“Published data on MRSA in daycare centers is very limited,” lead author Dr. Angela L. Hewlett, from the University of Texas Medical Branch in Galveston, told Reuters Health. “Of the 4 publications on the subject, only 1 is from the United States and was published in 1998, which is prior to the surge of community-acquired MRSA.”

The findings stem from an analysis of cultures taken from children, employees, and the environment at 1 daycare center located on the campus of a medical center.

In children, swab samples were obtained from the nose, oropharynx, axilla, groin, and perirectal areas, whereas in workers, swabs were taken from the nose and oropharynx only. When subjects were found to carry MRSA, testing was then performed on family members in their household.

Genetic testing was conducted to determine if the strains found in the daycare center were related.

The findings indicated that children treated with macrolide antibiotic in the past were at increased risk for MRSA colonization.

Among family members of children or staff found to carry MRSA, 35.3% were also colonized.

The genetic analysis revealed that many of the strains isolated were, in fact, related, "which implies that transmission of MRSA may be occurring in the daycare setting," Dr. Hewlett said.

"Daycare administrators, employees, and parents should take an active role in addressing the need for enhanced environmental cleaning and other infection-control modalities in order to prevent the spread of MRSA in the daycare setting," she emphasized.

Editor's comment. Because culture samples were taken from the nose, oropharynx, axilla, groin, and perirectal areas, it is unlikely that the true carrier rate was much higher than the 6.7% that was recorded. I always think of day care as a wonderful place to find pathogens, because preschoolers so generously share their saliva and other potential pathogen-bearing substances and objects. Outbreaks of infection caused by enteropathogens, pharyngeal pathogens, and skin pathogens are common, as is carriage of these pathogens. I would have expected the rate of colonization with MRSA to be >6.7%. (D.K.)