Community-Acquired MRSA Is Dominant at N.Y. Hospital

BETHESDA, Md. — Community-acquired methicillin-resistant Staphylococcus aureus was three times more prevalent than nosocomial MRSA in a small, nonteaching community hospital, reported Ananthakrishnan Ramini, M.D., at the annual conference on antimicrobial resistance sponsored by the National Foundation for Infectious Diseases.

MRSA was once limited to teaching hospitals but is rapidly becoming a dominant community pathogen, said Dr. Ramini, a physician at Columbia Memorial Hospital in a 192-bed facility in Hudson, N.Y.

Dr. Ramini and his colleagues conducted a prospective study of all MRSA infections in the hospital from January to December 2004. The investigators identified 78 cases of MRSA, of which 58 (74%) were community-acquired.

The definition of community-acquired infection was an infection that surfaced within 48 hours of hospital admission. Among the 51 patients older than 70 years, 47 had MRSA resistant to both clindamycin and erythromycin, which suggests more comorbidities in older patients, Dr. Ramini said. None of the organisms was resistant to oxacillin.

In addition, more of the MRSA cases (both community acquired and nosocomial) occurred outside than inside the ICU (56 vs. 22).

"There was a very high mortality among these patients," Dr. Ramini noted. Of the infected patients, 21 died. 39 were discharged to a nursing home, 15 went home, and 3 entered a tertiary care facility. "What was surprising was that community MRSA was so much more prevalent than nosocomial MRSA," Dr. Ramini said. "We need to be aware that treatment with a β-lactam alone is no longer a reliable empiric therapy," he added. He had no conflicts of interest to report.

Study: Linezolid Beats Vancomycin For Treatment of MRSA Infections

MIAMI — Linezolid was superior to vancomycin for treatment of presumed methicillin resistant Staphylococcus aureus-based infections in 717 patients, reported Kamal Itani, M.D., and associates in a poster presented at the joint annual meeting of the Surgical Infection Society and the Surgical Infection Society—Europe.

"We expected linezolid to be better, but not better than we expected," Dr. Itani, chief of surgery at VA Boston Health Care System, said in an interview. In this large, multinational, open-label study, patients were randomized to receive 600 mg of linezolid every 12 hours either via IV or orally, or 1 g of vancomycin via IV every 12 hours.

The treatment duration was planned to be 7-14 days, but some patients were treated for up to 21 days. In the initial population of 717 patients, those on linezolid had a shorter mean duration of IV therapy than those on vancomycin (1.7 days vs. 9.1 days).

Cure Rates in MRSA Population

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<th>Linezolid</th>
<th>Vancomycin</th>
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<td>94%</td>
<td>84%</td>
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Notes: Based on 329 MRSA-positive patients found over a 10-month period in a teaching hospital in 2004. Data are from a poster presented at the joint annual meeting of the Surgical Infection Society and the Surgical Infection Society—Europe. Source: Renae Stafford, M.D., and associates

MRSA Threatens Trauma Patients

MIAMI — In a prospective, 6-month study of 210 consecutive trauma patients, 15% had at least one nasal swab that was positive for methicillin-resistant Staphylococcus aureus, Grant V. Bochicchio, M.D., wrote in a poster presented at the joint annual meeting of the Surgical Infection Society and the Surgical Infection Society—Europe.

Of the 210 patients, 17 (8%) had a positive MRSA swab on admission, and 14 (7%) had a positive MRSA swab subsequently, said Dr. Bochicchio, a surgeon with the R. Adams Cowley Shock Trauma Center in Baltimore. Of the 17 patients with positive MRSA swabs on admission, 3 (18%) were diagnosed and treated for their infections. Of the 14 patients who had a positive MRSA swab later, 10 (71%) were diagnosed with MRSA infections; these 10 had been exposed to MRSA-positive patients.

Overall, patients who were MRSA positive on admission were significantly more likely to have a history of renal failure, diabetes, and drug abuse; patients who acquired MRSA infections later were significantly more likely to be obese and to have a history of renal or liver disease than were non-MRSA patients. A total of 42% of the patients who had positive MRSA swabs at any point during the study were treated with antibiotics within 6 months of their current hospital admission.

Also, hospital stays for MRSA-diagnosed patients and those who had MRSA-positive nasal swabs were significantly longer (25 days and 19.5 days, respectively) than for non-MRSA patients (14 days).

—Heidi Splete