Move Quickly to Detect and Destroy CA-MRSA

BY DAMIAN MCNAMARA Miami Bureau

AMELIA ISLAND, FLA. — Vigilance, aggressive drainage, and the appropriate antibiotic are components of a strategy to counter community-acquired methicillinresistant Staphylococcus aureus infections in an office practice setting, according to a presentation at a meeting on pediatrics for the primary care physician, sponsored

"There is something about staph that seems to wax and wane across the decades. I will contend that you and I are coming off a period of relatively mild staph and [entering] a period of bad staph," Dr. Kenneth Alexander said. Community-acquired methicillin-resistant Staphylococcus aureus (CA-MRSA) is increasingly common, appears to be permanent, and is polyclonal, he said.

CA-MRSA is distinct from hospital-acquired infection. "Kids are coming in with CA-MRSA and have no contact with the health care system whatsoever. So you don't need to look for that history," said Dr. Alexander, a pediatric infectious diseases expert at the University of Chicago.

Management of children with suspected CA-MRSA begins with drainage and culture of any abscess, he said. "Be aggressive about drainage. Now more than ever, culturing staph infections is critically important to good patient care."

Know your local S. aureus epidemiology and keep track of your own resistance data, Dr. Alexander said. In Chicago, about 85% of community-acquired S. aureus infections are methicillin resistant, compared with about 50% in northern Florida. "Resistance patterns in Chicago vary [between] children and adults. So a hospital antibiogram is not as helpful to us about kids."

Trimethoprim and sulfamethoxazole (TMP/SMX), clindamycin, and minocycline are treatment options for minor CA-MRSA infections. "You can use something wimpy like TPM/SMX with a small drained abscess [less than 2 cm] or small areas of cellulitis or impetigo, with good follow-up," Dr. Alexander said.

If those criteria cannot be met; or the patient has lesions on the face, head, neck, hands, or feet; the patient looks sick or febrile; the lesion looks deeper than the skin; or the infection is progressing, "then we have to pull out the big stick, clindamycin," Dr. Alexander said. "TMP/SMX and clindamycin are your go-to antibiotics." The good news, he said, is "CA-MRSA is more susceptible to these treatments than hospital-acquired infections" are.

For serious outpatient infections, Dr. Alexander suggested oral clindamycin or a combination of TMP/SMX and rifampin, although rifampin is expensive. If the culture subsequently indicates a susceptible form of infection, the child can be switched to Keflex (cephalexin).

"Fear staph [S. aureus] infections, especially in babies," he said. "If you see staph in a baby, walk over to the wall and pull the fire alarm. This is a code-blue infection."

For the most serious infections, admit the child to the hospital and treat with either intravenous clindamycin or intravenous vancomycin. Vancomycin is indicated if the S. aureus is erythromycin-resistant and resistance to clindamycin is inducible (indicated with a positive D-test). "At the University of Chicago, we use IV clindamycin."

Linezolid (Zyvox) and daptomycin (Cubicin) are two newer antibiotics for MRSA, "although I am not suggesting you use them," Dr. Alexander said. Linezolid shows reliable oral activity against MRSA. "The downside is this stuff is priced to compete with hospitalization. And it's three doses of a liquid that tastes terrible." Daptomycin is restricted for life-threatening infections in hospitalized patients.

Some physicians asked Dr. Alexander about using amoxicillin-clavulanate (Augmentin). "If you have a kid with MRSA, and you treat with Augmentin, what you have is a kid with MRSA and diarrhea, nothing more," he said.

One should include herpes infection in the differential diagnosis for a patient with recurrent infections on the nails or in the nose, he said. And, "if you see something that looks like a spider bite, and you are not in an endemic area, think CA-MRSA."

Another common question is the prevention strategy for a family passing S. aureus infections back and forth, Dr. Alexander said. "Treat staph in family a little bit the way you would with lice." Proper hygiene is important. Prescribe antibacterial soaps; use of clean, dry towels and bedding; and frequent hand washing. Also, assess skin care products to make sure they are not the vector.

