For Health Professionals

Health Alerts

Health Update #150 - Community-acquired Methicillin-Resistant Staphylococcus aureus (CA-MRSA) - November 15, 2005

Recently, physicians in Western New York have observed increased numbers of patients with skin and soft tissue infections. Many of these are due to community-acquired methicillin-resistant Staphylococcus aureus (CA-MRSA) bacteria, which are now widespread in the U.S. While clinicians often make a presumptive diagnosis of possible MRSA infections in many patients who are not tested, laboratory cultures confirm MRSA as a causative agent in a sizeable number of these infections.

Clinical and Epidemiological Features

A spectrum of manifestations has been seen, including impetigo, minor pustules and furuncles, abscesses ("boils") requiring drainage, and severe, necrotizing large abscesses.
These skin lesions may appear anywhere on the body, with the buttocks, axillae, and injury sites being the most common. Infections occur in all ages, including newborns, infants, children, adolescents, adults and the elderly. Sepsis and other invasive diseases (e.g., pneumonia, osteomyelitis, toxic shock-like syndrome) are uncommon.

Infections with MRSA are highly contagious, and often recurrent. The history often reveals that other family members and close contacts of the patient have skin infections. Frequently, patients are seen multiple times with recurrences, which may duplicate the previous infection(s), or manifest differently, in a different site. The explanation for this is that the primary location where MRSA bacteria are colonized is the nose.

Treatment

When a significant abscess forms, surgical incision and drainage may be necessary. Prompt recognition, accurate diagnosis, and appropriate treatment are important.

For localized, minor impetigo, topical antibiotic treatment with mupirocin (Bactroban) may be sufficient.

Systemic antibiotics are used for all other CA-MRSA skin infections. At present, sulfamethoxazole/trimethopim (Bactrim, Septra) is recommended. Alternative antibiotics include clindamycin (Cleocin), doxycycline, and linezolid (Zyvox). Antibiotic susceptibility testing may be helpful.

While the majority of clinical manifestations of infection are on the skin, most patients (and many healthy people) are also colonized with CA-MRSA in the nose. Therefore, when recurrent and/or group spread of CA-MRSA infections occur, the following protocol is useful, for all family members:

- intranasal mupirocin bid for 5 days
- chlorhexidine scrub qd for 1 week
- trimmed, frequently cleaned fingernails
- total bathroom cleanout
- no sharing of any bathroom items, such as towels, cups, etc

For additional information please visit the following link:
http://www.cdc.gov/ncidod/diseases/submenus/sub_mrsa.htm