

Community-Acquired Methicillin-Resistant Staphylococcus Aureus (CA-MRSA)

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Community-Acquired Methicillin-Resistant Staphylococcus Aureus (CA-MRSA or “resistant Staph”) has received a lot of press over the last few years. Unfortunately, media coverage is incomplete, confusing, and often scary. I hope to clarify some of the facts about infections from this bacteria, infections which are becoming more common but are treatable.

Staphylococcus aureus (“staph” for short) is a very common bacteria which lives on the skin (primarily in the nose) of about 30% of the population, most of whom are completely symptom free. Methicillin-Resistant Staphylococcus aureus (MRSA) is a strain of this bacteria which has developed resistance to the most common first-line antibiotics, the penicillin family of antibiotics. The term Community Acquired MRSA (CA-MRSA) distinguishes the skin infections in healthy individuals from MRSA in hospitalized or recently hospitalized patients. Hospitalized patients can develop severe infections not only in the skin but in surgical wounds, the urinary tract, the lungs or blood stream. As a pediatrician, I fear this infection, particularly in patients with long term hospital stays and in patients with weakened immune systems. It is common practice, however, to treat healthy individuals with skin infections in the office setting.

Any Staph strain can cause an infection if it gets under the skin. It usually causes cellulitis, an infection of the skin surface. Or it may cause a boil. MRSA tends to cause boils which are red, warm and painful. They may enlarge rapidly and develop a pocket of pus under the skin called an abscess.

The first line of treatment for MRSA infections is to drain the boil if possible. Some drain spontaneously and do not need further treatment or antibiotics. An infection which does not drain on its own may need warm soaks or may need to be drained by a physician. In most cases these types of infections are also treated with antibiotics, both topical and oral. Some physicians may advise to use the topical antibiotic in the nose to clear any bacteria which may have colonized that area.

MRSA infections are spread by contact. Breaks in the skin, even small abrasions can increase the likelihood that bacteria can get under the skin and cause an infection. Close skin-to-skin contact, poor hygiene, crowded living conditions, and contaminated surface areas all associated with MRSA spread. Those with weakened immune systems are at higher risk of developing severe infections with MRSA.

Prevention, therefore, relies on good hygiene. Handwashing is always the best prevention for the spread of infection. Keeping cuts and scrapes covered and avoiding other people’s wounds are important. Also, avoiding sharing of personal items such as towels or razors can prevent infections among groups of people. For example, you may note that your gym now requires you to place a towel on the equipment prior to use. If you do notice an enlarging red area or boil on your or your child’s skin, you should see your doctor.

The fear surrounding MRSA lies in it representing the increase in antibiotic resistance even in the healthy population. Resistance to antibiotics is growing problem: one of my teachers once said that the day penicillin was discovered was the day that resistance started. You may notice that your

physician does not always treat your child's ear infection right away. You may be told that many infections do not benefit from antibiotic treatment at all. You will not be given broad-spectrum, newly discovered antibiotics for illnesses which can be treated with the old standards. And you will be told to take the entire course of antibiotics prescribed (unless an allergic reaction or other complication ensues). This approach to medicine will prevent a rapid increase in antibiotic resistance in the population. In other words, MRSA has caused the development of a healthy fear of antibiotic resistance and a change in the practice of medicine, I think, for the better.