MRSA Overview

MRSA stands for methicillin-resistant staphylococcus aureus. It is a type of bacteria that is resistant to some common antibiotics and can cause infections in the skin and many other places in the body. Staphylococcus aureus, often called “staph,” are bacteria that normally live on the skin or in the nose. Staph on the surface of the skin do not cause problems. However, if the staph enter the body through a cut or a wound or another break in the skin, an infection can happen.

Up until recently, problems with the MRSA type of staph have mainly been in healthcare settings. There are now more and more problems with MRSA infections in the community. Infections with MRSA are serious health problems that can cause death.

Most MRSA infections are acquired in one of two ways:

- Healthcare-Associated MRSA (HA-MRSA):
  - Can be acquired by people in any healthcare setting. MRSA can be a big problem for the elderly, people with weakened immune systems, dialysis patients (people undergoing blood cleansing treatment because of kidney failure), and those who have had surgery.
- Community-Associated MRSA (CA-MRSA):
  - Community spread of MRSA is becoming more common. It is known to spread among small children, in crowded settings or in situations where there is close skin-to-skin contact. MRSA can be spread through shared items, such as children's toys, razors, towels or sports equipment.

CAUSES

All staph, including MRSA, are normally harmless unless they enter the body through a scratch, cut or another wound such as with surgery. All staph, including MRSA, can be spread from person to person by touching contaminated objects as well as through direct contact.

SPECIAL GROUPS

MRSA can present problems for special groups of people. Some of these groups include:

- Breastfeeding women.
  - The most common problem is CA-MRSA infection of the breast (*mastitis*). There is evidence that MRSA can be passed to an infant from infected breast milk. Your caregiver may recommend that you stop breastfeeding until the mastitis is under control.
  - If you are breastfeeding and have a MRSA infection in a place other than the breast, you may usually continue breastfeeding while under treatment. If taking antibiotics, ask your caregiver if it is safe to continue breastfeeding while taking your prescribed medicines.
- Neonates (babies from birth to one month old) and infants (babies from one month to one year old). There is evidence that MRSA can be passed to an infant at birth if the mother has a CA-MRSA on the skin, in or around the birth canal, or an infection in the uterus, cervix, or vagina. CA-MRSA infection can look the same as a normal newborn or infant rash or several other skin infections. This can make it hard to diagnose MRSA.
- Immune compromised individuals. If you have an immune system problem, you may have a higher chance of developing an MRSA infection.
- Persons after any type of surgery. Staph in general, including MRSA, are the most common cause of infections that occur at the site of recent surgery.
- Persons on long-term steroid medications. These kinds of medications can lower your resistance to infection. This can increase the chances of getting MRSA.

DIAGNOSIS

- Diagnosis of MRSA is done by cultures of fluid samples that may come from:
  - Swabs taken from cuts or wounds in infected areas.
  - Nasal swabs.
  - Saliva or deep cough specimens from the lungs (*sputum*).
  - Urine.
  - Blood.
- Many people are "colonized" with MRSA but have no signs of infection. This means that people carry the MRSA germ on their skin or in their nose and do not have and may never develop MRSA infection.

TREATMENT

Treatment varies and is based on how serious, how deep or how extensive the infection process is. For example:

- Some skin infections, such as a small boil or abscess, may be treated by draining pus from the site of the infection.
- Deeper or more widespread soft tissue infections are usually treated with surgery to drain pus and antibiotics given by vein or by mouth. This may be recommended even if you are pregnant.
- Serious infections may require a hospital stay.
- If antibiotics are given, they may be needed for several weeks.

PREVENTION

Because many people are colonized with staph, including MRSA, preventing spread of the bacteria from person to person is most important. The best way to prevent the spread of bacteria and other germs is through proper hand washing or by using alcohol-based hand disinfectants. The following are other ways to help prevent MRSA infection within the hospital and community settings.

- Healthcare Settings:
  - In health care settings, strict hand washing or hand disinfection procedures should be followed before and after touching every patient.
  - Patients infected with MRSA are placed in isolation to prevent the spread of the bacteria.
  - Health care workers will routinely wear disposable gowns and gloves when touching or caring for patients infected with MRSA.
  - Hospital surfaces are disinfected frequently.
- Community Settings:
  - Wash your hands frequently with soap and water for at least 15 seconds. Otherwise, use alcohol based hand disinfectants when soap and water is not available.
  - Do not share personal items. For example, avoid sharing razors, towels, clothing and athletic equipment.
  - Keep wounds covered. Pus from infected sores may contain MRSA and other bacteria. Keep cuts and abrasions clean and covered with sterile, dry bandages until they are healed.
  - If you have a wound that appears infected, ask your doctor if a culture for MRSA and other bacteria should be done.
  - Take all antibiotic medication as prescribed by your caregiver. Even if you feel better, do not stop taking it.
- If you are breastfeeding, talk to your caregiver about MRSA. You may be asked to temporarily stop breastfeeding.

HOME CARE INSTRUCTIONS

- Take all medications as prescribed. Do not skip medications or stop them early just because you seem to be doing better.
- For those with MRSA infections, avoid close contact with those around you as much as possible. Do not use towels, razors, toothbrushes, or bedding etc. that will be used by others.
- To fight the infection, follow your caregiver's instructions for wound care.

SEEK IMMEDIATE MEDICAL CARE IF:

- The infection appears to be getting worse, such as:
  - Increased warmth, redness or tenderness around the wound site.
  - A red line develops and extends from the infection site.
  - The area around the infection begins to turn dark in color.
  - Wound drainage is tan, yellow or green in appearance.
  - Foul smell.
- You develop nausea and vomiting or cannot keep medicine down.
- You or your child has an unexplained oral temperature above 102.0° F (38.9º C). You or your child develop sweating, chills or body aches and pains.
- Your baby is older than 3 months with a rectal temperature of 102º F (38.9º C) or higher.
- **Your baby is 3 months old or younger with a rectal temperature of 100.4º F (38º C) or higher.**
- You have difficulty breathing.

MAKE SURE YOU:

- Understand these instructions.
- Will watch your condition.
- Will get help right away if you are not doing well or get worse.

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