DEPARTMENT OF PUBLIC HEALTH
THE CITY OF WATERBURY
CONNECTICUT

School Health Advisory: METHICILLIN – RESISTANT STAPHYLOCOCCUS AURES (MRSA)

"Any community acquired skin infection should be considered to be MRSA and be treated as such."

Michael Rokosky, M.D.

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WHAT IS MRSA?

MRSA is an infection caused by the bacteria Staphylococcus aureus or Staph that has become resistant to the antibiotic methicillin. In the 1940's all Staph infections could be cured with penicillin but after a while the bacteria changed its susceptibility and by the 1950's penicillin no longer worked for Staph infections. New antibiotics were created, including methicillin, which could be used to treat Staph. By 2000 Staph was able to change again to become resistant to methicillin.

- MRSA was once limited to hospitals and nursing homes but over the years has spread into communities in places like schools, households, and child care centers. The infections still occur in hospital but the MRSA acquired in hospitals often has multiple resistance to other antibiotics that make them more difficult to treat.
- According to surveys up to 30% of children in U.S. classrooms have MRSA on their skin or in their nose. Most children who are carriers of MRSA do not develop any symptoms of infection. The MRSA simple lives on their skin or in their nose.

HOW IS MRSA SPREAD?

Staph is passed from person to person through direct contact with skin or with direct contact with contaminated surfaces. Staph enters the body through breaks in the skin which then may become infected. This can happen from minor cuts or scraps, scratching a bug bite, eczema, body piercing, or tattoos.

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SIGNS AND SYMPTOMS OF A STAPH INFECTIONS

A Staph infection usually starts as bump or infected area of skin that appears red and swollen, has pus, is warm to the touch, or just looks infected. If the infection is accompanied by fever the infection may becoming invasive and you should seek medical attention.

The most common infections caused by MRSA include abscesses, boils, and cellulitis. They may be mistaken for a spider bite or resemble a pimple. In rare cases, MRSA can lead to more serious infections inside the body like pneumonia, bone infections, sepsis, or meningitis.

TREATMENT OF MRSA

If a Staph infection is diagnosed, obtain a history of whether the infection is community acquired or possibly hospital acquired. This is an important step in the treatment plan because a hospital acquired infection may need an infectious disease consult to advise on the antibiotic coverage to assure correct treatment.

If a skin infection is suspected, after washing the lesion with soap and water, cover the wound completely with a clean dressing, and tape all 4 sides and seek medical help.

TREATMENT OPTIONS

- If the collection of pus is less than 1 to 2 inches in diameter the doctor may make a small incision to drain the pus out. Nature usually handles the rest without antibiotics.
- Children with boils, abscesses, or cellulitis can have a culture taken to determine the best antibiotic choice.
- If the abscesses are very small, antibiotics may be used to treat MRSA without the need for an incision.
- Very large abscesses need to be drained, especially if accompanied by fever. A culture should be obtained and an antibiotic that is likely to treat MRSA should be started. Once the culture results are obtained the antibiotic can be changed if need be. The treatment plan can sometimes be done as outpatient but with a severe infection or a young child a short hospitalization may be required.

MEDICATION

- Antibiotics such as clindamycin or trimethoprim-sulfamethoxazole along with drainage can treat most community acquired MRSA infections.
- Health care acquired MRSA should be treated in consultation with an infectious disease specialist.

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PREVENTION OF SPREAD

- Always use good hand washing habits.
- Cover open or draining sores with a clean, dry bandage.
- Avoid sharing personal items, such as towels, razors or clothing.
- Frequently wash or clean shared toys, dress-up clothing, and other play equipment.
- Routinely clean surfaces that have frequent contact with skin (chairs, toilet seats, doorknobs, keyboards, phones, etc.)
- Make sure athletic equipment and locker rooms are regularly cleaned and disinfected, focusing on frequently touched surfaces such as wrestling mats, exercise equipment, and benches. Athletes should shower right after practices and wash uniforms after each use.

REFERENCES

1. MRSA and Children: https://www.healthychildren.org/English/health-issues/conditions/infections/Pages/MRSA.aspx
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3. MRSA: www.ct.gov/dph/cwp/view.asp?a=3136&q=397824
4. Red Book 2018-2021 – p 479, 734

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