

Doctors issue new treatment guidelines for skin abscesses caused by MRSA

March 12 2014

It has been more than 10 years since the clinical battle began with community-acquired methicillin-resistant *Staphylococcus aureus* (MRSA), and doctors are still grappling with how to diagnose, treat and prevent this virulent form of staph infection, which is immune to many antibiotics.

As MRSA cases have increased dramatically over the decade, so have the number of skin abscesses—generally pus-filled boils or pimples with discharge—that characterize these infections. Now, researchers from UCLA have issued updated guidelines outlining the best ways to treat and manage these abscesses.

The first cases of MRSA were relatively mild and primarily affected high-risk patients in hospitals and long-term care facilities. But beginning in the early 2000s, doctors identified a new, highly contagious and hard-to-treat strain known as "community-acquired" MRSA, which had spread to the general public. This more virulent form of the infection can be dangerous and in severe cases cause necrotizing pneumonia, fasciitis and sepsis.

One of the first reports that MRSA infections would become epidemic was published in the *New England Journal of Medicine* in 2006 by Dr. Gregory Moran, Dr. David A. Talan and colleagues at Olive View–UCLA Medical Center. Their research showed that community-associated MRSA had become the most common cause of skin infection among patients presenting at emergency rooms and other settings in the

United States.

In a new report published March 13 in the *New England Journal of Medicine*, Talan and Dr. Adam J. Singer of the emergency medicine department at Stony Brook University in New York present updated "best practice" guidelines for managing the skin abscesses associated with community-acquired MRSA.

"MRSA is not going away, so we need to fine-tune ways to treat it," said Talan, a professor in the division of infectious diseases and chief of the department of emergency medicine at Olive View–UCLA Medical Center. "We hope the information will help guide doctors as to the best ways to address these infection-related skin abscesses."

For the article, Talan and Singer, both of whom are on the front lines of treating MRSA, focused on abscesses that occur on the trunk of the body and the extremities, like the arms and legs, which are often treated by general practitioners or emergency room physicians. An abscess is a collection of pus that has accumulated within tissue because of the inflammatory process in response to infections like MRSA.

The doctors reviewed prior studies and provided their expert opinions. Highlights of their clinical update include an emphasis on new diagnostic techniques such as ultrasound, guidance for doctors on the most effective antibiotics, and an overview of abscess-draining techniques that are less invasive, painful and disfiguring than conventional methods.

Diagnosing and treating abscesses

While in most cases MRSA diagnosis and abscess drainage is straightforward, the authors note that technologies like ultrasound can enhance diagnostic accuracy for abscesses located deep in the lower levels of the skin. Ultrasound, which is now available in more emergency

departments and hospitals, can also help ensure that an abscess has been adequately drained.

Still, most abscesses can be drained with a single small incision, the authors say. In their paper, they discuss techniques for closing drainage incisions and note that the conventional method of packing a wound with sterile gauze to help absorb excess fluid may not always be necessary.

MRSA and the use of antibiotics

Talan and Singer concur with the Infectious Diseases Society of America that when simply draining an abscess is not enough to address a community-acquired MRSA infection, preferred antibiotics include trimethoprim-sulfamethoxazole, doxycycline, minocycline and clindamycin.

They note that antibiotic treatment is especially helpful for patients who have risk factors like recurrent infection, extensive or systemic disease, rapid disease progression, a suppressed immune system, or who are either very young or very old.

But growing antibiotic resistance may also impact treatment, they warn, noting that MRSA has also become resistant to clindamycin and tetracyclines in some communities. The authors encourage doctors to be aware of local susceptibility patterns.

"Even with optimal treatments, there is still a relatively high failure rate in treating these infections, so good patient education on the signs to watch for and availability of close medical follow-up is always recommended," Talan said.

The update also provides doctors with strategies to prevent new infections in some patients who are burdened with frequent recurrences.

Talan and his team are currently working on a large clinical trial that will further investigate optimal antibiotic treatment for MRSA skin infections.

"If you see a skin infection beginning, you should see your doctor right away so that a little problem does not become a bigger one and more difficult to treat," he said.

Preventing MRSA from spreading

Because MRSA and other types of skin infections can be easily transmitted between people, Talan offers the following prevention guidance:

- People with [skin infections](#) should be careful to keep lesions covered with a dressing or band aid and wash their hands thoroughly after changing the bandage. Place bandages in the trash.
- Avoid sharing personal items like towels, razors or brushes with people who have an active [skin](#) infection.

Provided by University of California, Los Angeles

Citation: Doctors issue new treatment guidelines for skin abscesses caused by MRSA (2014, March 12) retrieved 11 May 2024 from <https://medicalxpress.com/news/2014-03-doctors-issue-treatment-guidelines-skin.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.