

COMMON INFECTIOUS DISEASES -SERIES 3

This article is the third in a series of educational material on specific Infectious Diseases.

Shingles: Also known as *Herpes Zoster*, Shingles is a viral infection caused by the same virus that causes chicken pox (varicella zoster). It is not the same varicella virus that causes cold sores and genital herpes. If you have had chicken pox, the virus lies dormant in nerve tissue near the brain and spinal cord. If the virus is reactivated, Shingles occurs, lasting 2-6 weeks.



Symptoms: The most common symptom of Shingles is a painful, burning rash of blisters, usually on one side of the body (torso) but it can present itself around the eye, face, or neck. The rash usually crusts over in 7-10 days. Other symptoms include itching, sensitivity to touch, headache, fever, chills, fatigue, upset stomach, and light sensitivity.

Risk Factors: Shingles is most common in people over the age of 50 years, those with a weakened immune system such as HIV/AIDS, those undergoing cancer treatment, and individuals with long-term use of certain medications such as steroids or to prevent transplant rejection. A contagious person with Shingles can pass the virus to anyone not immune to chicken pox. That person could then develop chicken pox.

Diagnosis: Generally speaking, diagnosis is made based upon the clinical presentation of signs and symptoms. However, PCR testing (polymerase chain reaction) can be done for an atypical presentation. Swabbing of the blisters is another means of testing for the shingles virus.

Treatment: Prompt treatment is key to early recovery and preventing complications. There are a variety of medications used to treat Shingles depending on the severity. Antiviral medications include: Acyclovir (Zovirax), Famciclovir (Famvir), and Valacyclovir (Valtrex). To help relieve pain, other medications may be prescribed: Capsaicin (Qutenza), Gabapentin (Neurontin), tricyclic antidepressants, codeine, lidocaine in spray, gel, cream or patch form, and corticosteroids. For less severe pain, Tylenol or Ibuprofen can be taken. Cool compresses and colloidal oatmeal baths may also help to sooth the discomfort.

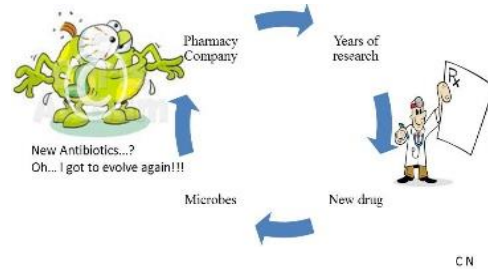
Complications: The most common complication of Shingles is post-herpetic neuralgia. Other complications that can occur are vision loss, encephalitis, facial paralysis, hearing or balance problems, bacterial skin infections.

Prevention: The CDC recommends several steps in preventing the occurrence and spread of the Shingles virus.

1. Vaccination: Shingrix- recommended for people 50+ years whether or not having had Shingles. Two doses.
2. Stay away from pregnant women (no vaccine/no chickenpox), newborns, those with weakened immune system.
3. Cover the rash; avoid touching or scratching the lesions.
4. Wash your hands often.



MRSA (Methicillin -Resistant Staphylococcus Aureus): This is a staph bacteria resistant to many antibiotics used to treat ordinary staph infections. It is the result of years of unnecessary antibiotic use in treating colds, flu, and other viral infections that do not respond to antibiotic therapy. The bacteria evolve to survive the antibiotic treatment and learn to resist them. Also called a “Super Bug”. It is known to transfer to dogs and cats, and has been found in sand and water at US beaches.



Symptoms: Usually starts as a small red bump resembling a pimple or spider bite, progressing to an abscess with swelling, redness, and pain.

An individual can be a carrier. According to the CDC, 5% of the population chronically carries MRSA, known as “colonization” which is commonly found in the nose.

Risk Factors: MRSA is divided into two categories, healthcare-acquired (HA) and community-acquired (CA). Healthcare-acquired MRSA can occur when an individual is hospitalized, has an invasive medical device such as an IV line or urinary catheter, or resides in long-term care facilities.

Community-acquired MRSA can occur in individuals participating in contact sports, living in crowded or unsanitary conditions (jail, military camps, child care), or involved with injecting illicit drugs.

Diagnosis: When an abscess has formed, the healthcare provider may do an incision and drainage (I & D) of the abscess or aspirate pus if the abscess is small. The specimen is sent to the lab for identification of the bacteria as well as determining the bacteria’s sensitivity to antibiotics that can be used in treatment.

Treatment: Mild skin infections usually heal on their own. For more serious skin infections, there are several antibiotics that can be used. Tetracycline and Clindamycin may be used since MRSA is resistant to Penicillin and Cephalosporins. Some of the newer antibiotics include Dalvance, Orbactiv, and Sivextro. If MRSA has become more invasive in the body, intravenous Vancomycin may be used. Consulting with an Infectious Disease Specialist is important in serious cases and when there is little response to treatment.

Complications: When left untreated, MRSA can become more invasive in the body and set-up life-threatening infection in the bloodstream (known as sepsis), lungs (pneumonia), heart valves, and bones/joints.

Prevention: Hospitalized patients with MRSA will be placed in isolation to prevent the spread of the bacteria. Healthcare workers wear protective garments, use strict hand washing, and have equipment and room surfaces disinfected.

In the case of community-acquired MRSA, it is important to wash hands frequently or use hand sanitizer with 60% alcohol content. Do not share personal items. Sanitizing linens and sports clothes using hot water after each use will help stop the transfer of bacteria. Showering immediately after participating in a sports game or practice is also helpful.

For comparison of WI hospital infection rates, go to <https://checkpoint.wha.org/Compare-Hospitals>.

Resources: *cdc.gov, mayoclinic.org, WebMD*