SHINGLES (HERPES ZOSTER)

WHAT IS IT?
Shingles, or “herpes zoster”, is a viral infection that results in painful blisters on the skin. It is caused by the varicella-zoster virus, which is the same virus that causes chickenpox. You can develop shingles only if you have had chickenpox in the past. One in five people with a history of chickenpox will develop shingles at some time in their life.

After causing chickenpox, the varicella-zoster virus retreats to the nerve roots. Most of the time, the immune system keeps the virus under control inside the nerve cells. Under certain circumstances (usually due to illness, trauma, or stress), the virus can reactivate, escape the nerve cells, and travel along the nerve path to the skin, resulting in a painful rash.

Most people recover easily and fully from shingles. 1 to 4% of people with shingles will have a recurrence.

WHAT ARE THE SYMPTOMS?
• Pain at the skin site before the rash appears is a hallmark of shingles, occurring in 75% of infected individuals.
  o This pain may be experienced as a burning sensation, intense sensitivity to touch, or tingling in a well-defined area of skin, known as a dermatome.
  o A dermatome is the band of skin innervated by a specific nerve root. Each nerve root goes to only one side of the body. Zoster typically involves a nerve root of the trunk or face, but any part of the body may be affected.
• A rash of red blisters or bumps develops in the affected dermatome over 3-5 days. These blisters usually scab over by 7-10 days, although they can be present for up to 2-4 weeks.
• About 20% of people with shingles also have flu-like symptoms, such as fever, headache, and body aches.
• Secondary bacterial skin infections can occur if the blisters are scratched.

WHAT ARE POSSIBLE COMPLICATIONS?
• Herpes Zoster Ophthalmicus (HZO)
  o Shingles in or around the eye, or herpes zoster ophthalmicus, requires urgent evaluation by an eye specialist because the infection can lead to scarring and permanent vision impairment.
  o Symptoms can include headache, fever, a painful red eye, and blisters around the eye or on the nose.
• Postherpetic Neuralgia (PHN)
  o Postherpetic neuralgia is a condition in which the pain from shingles persists long after the blisters have healed. It is typically defined as pain lasting for more than 4 months after the rash appears.
  o PHN is more common in older adults, occurring in 20% of those over 60 years of age (versus 5% in the young adult population).
  o Individuals who experience a recurrence of shingles also have a higher risk of developing PHN.

HOW IS IT SPREAD?
The varicella-zoster virus lives in the fluid from the blisters of shingles.
• The virus can be spread until the blisters have crusted over (usually 7-10 days into the illness).
• Exposure to the fluid (typically through direct contact with an open sore) does not cause shingles but can lead to chickenpox in someone who has never had chickenpox or the chickenpox vaccine.
• If you have shingles, it is important to stay away from babies younger than 12 months and pregnant women because a chickenpox infection can be very dangerous for a developing infant.

HOW IS IT DIAGNOSED?
Shingles is usually diagnosed by the classic appearance of painful blisters in a well-defined area of skin on one side of the body. If the diagnosis is unclear, lab tests may be ordered.
HOW IS IT TREATED?

• Medications
  - Antiviral medications used in the treatment of shingles include Zovirax (acyclovir), Famvir (famciclovir), and Valtrex (valacyclovir).
    - These medications do not cure shingles but are effective in reducing the severity and length of the illness.
    - Antiviral medications should be started within 72 hours of symptom development. Treatment can be considered after 72 hours if new lesions are still developing.
  - Over-the-counter pain medications can be used to treat pain and fever. Examples include acetaminophen (Tylenol), ibuprofen (Advil or Motrin), and naproxen (Aleve). It is important to take ibuprofen or naproxen with food to avoid an upset stomach. Sometimes, stronger prescription pain medication may be required.

• Referrals
  - Involvement of the eye can lead to visual loss and requires an urgent ophthalmology referral. Do not delay seeking care if you develop blisters near your eyes or on your nose.

• Other treatment tips
  - To decrease itching and discomfort, consider the following skin care measures:
    - Cool compresses to dry out blisters.
    - Bathing with Aveeno oatmeal soap.
    - Soaking in a tub of water mixed with Aveeno oatmeal powder or Burrow’s (Domeboro) powder. Burrow’s powder is available over-the-counter or by prescription.
    - Using calamine or other drying lotions.
  - An oral antihistamine can decrease itching.
    - Non-sedating antihistamines available over-the-counter include Zyrtec (cetirizine), Claritin (loratadine), and Allegra (fexofenadine).
    - Benadryl (diphenhydramine) works well but is sedating and requires dosing every 6 hours.
  - AVOID TOUCHING OR SCRATCHING THE LESIONS! Scratching can lead to secondary infection with bacteria. Wash your hands often.
  - KEEP THE BLISTERS COVERED until they have crusted over to prevent the spread of infection to others.

• Returning to class or work
  - If the blisters are on your face, you may return after the area has crusted over, which usually takes 7-10 days.
  - If the blisters are in an area that you can cover (with a bandage or clothing), you may return when you are feeling better.

HOW CAN I PREVENT IT?
The varicella vaccine routinely given during childhood is the most effective way to prevent chickenpox and shingles. Vaccination has been shown to prevent 70-90% of all varicella infections.

• In people 13 years of age and older who have never had chickenpox or the chickenpox vaccine, 2 doses of the vaccine (Varivax) are given 4 to 8 weeks apart.
• The varicella vaccine is available at Student Health to students who are not pregnant or planning a pregnancy in the near future. It cannot be given to immunocompromised patients.
• The varicella zoster vaccine (Zostavax) is a different vaccine available to adults age 50 or over to prevent shingles. It can also decrease symptom severity and the incidence of postherpetic neuralgia.

SEE YOUR HEALTHCARE PROVIDER IMMEDIATLY IF YOU HAVE:
• Worsening symptoms, including fever, headache, and extension of the blisters.
• Any involvement of the skin near the eye or on the nose.
• Confusion or disorientation.
• Loss of muscle coordination.
• Signs and symptoms of a bacterial skin infection, such as increased tenderness, warmth, redness, swelling, and pus.

RECOMMENDED WEBSITES:

Published by VCU Division of Student Affairs and Enrollment Services
University Student Health Services (804) 828-8828 - Monroe Park Campus clinic
(804) 828-9220 - MCV Campus clinic
Wellness Resource Center (804) 828-9355 - 815 S. Cathedral Place Revised 5/14