

NINDS Shingles Information Page

What is Shingles?

Shingles (herpes zoster) is an outbreak of rash or blisters on the skin that is caused by the same virus that causes chickenpox—the varicella-zoster virus. The first sign of shingles is often burning or tingling pain, or sometimes numbness or itch, in one particular location on only one side of the body. After several days or a week, a rash of fluid-filled blisters, similar to chickenpox, appears in one area on one side of the body. Shingles pain can be mild or intense. Some people have mostly itching; some feel pain from the gentlest touch or breeze. The most common location for shingles is a band, called a dermatome, spanning one side of the trunk around the waistline. Anyone who has had chickenpox is at risk for shingles. Scientists think that in the original battle with the varicella-zoster virus, some of the virus particles leave the skin blisters and move into the nervous system. When the varicella-zoster virus reactivates, the virus moves back down the long nerve fibers that extend from the sensory cell bodies to the skin. The viruses multiply, the tell-tale rash erupts, and the person now has shingles.

Is there any treatment?

The severity and duration of an attack of shingles can be significant-

ly reduced by immediate treatment with antiviral drugs, which include acyclovir, valcyclovir, or famcyclovir. Antiviral drugs may also help stave off the painful after-effects of shingles known as postherpetic neuralgia. Other treatments for postherpetic neuralgia include steroids, antidepressants, anticonvulsants, and topical agents.

In 2006, the Food and Drug Administration approved a VZV vaccine (Zostavax®) for use in people 60 and older who have had chickenpox. When the vaccine becomes more widely available, many older adults will for the first time have a means of preventing shingles. Researchers found that giving older adults the vaccine reduced the expected number of later cases of shingles by half. And in people who still got the disease despite immunization, the severity and complications of shingles were dramatically reduced. The shingles vaccine is only a preventive therapy and is not a treatment for those who already have shingles or postherpetic neuralgia.

What is the prognosis?

For most healthy people who receive treatment soon after the outbreak of blisters, the lesions heal, the pain subsides within 3 to 5 weeks, and the blisters often leave no scars. However, shingles is a serious threat

in immunosuppressed individuals—for example, those with HIV infection or who are receiving cancer treatments that can weaken their immune systems. People who receive organ transplants are also vulnerable to shingles because they are given drugs that suppress the immune system.

A person with a shingles rash can pass the virus to someone, usually a child, who has never had chickenpox, but the child will develop chickenpox, not shingles. A person with chickenpox cannot communicate shingles to someone else. Shingles comes from the virus hiding inside the person's body, not from an outside source.

What research is being done?

The National Institute of Neurological Disorders and Stroke (NINDS) and other institutes of the National Institutes of Health (NIH) conduct shingles research in laboratories at the NIH and also support additional research through grants to major medical institutions across the country. Current research is aimed at finding new methods for treating shingles and its complications.

Source: National Institute of Neurological Disorders and Stroke, National Institutes of Health. Last updated December 21, 2009.