

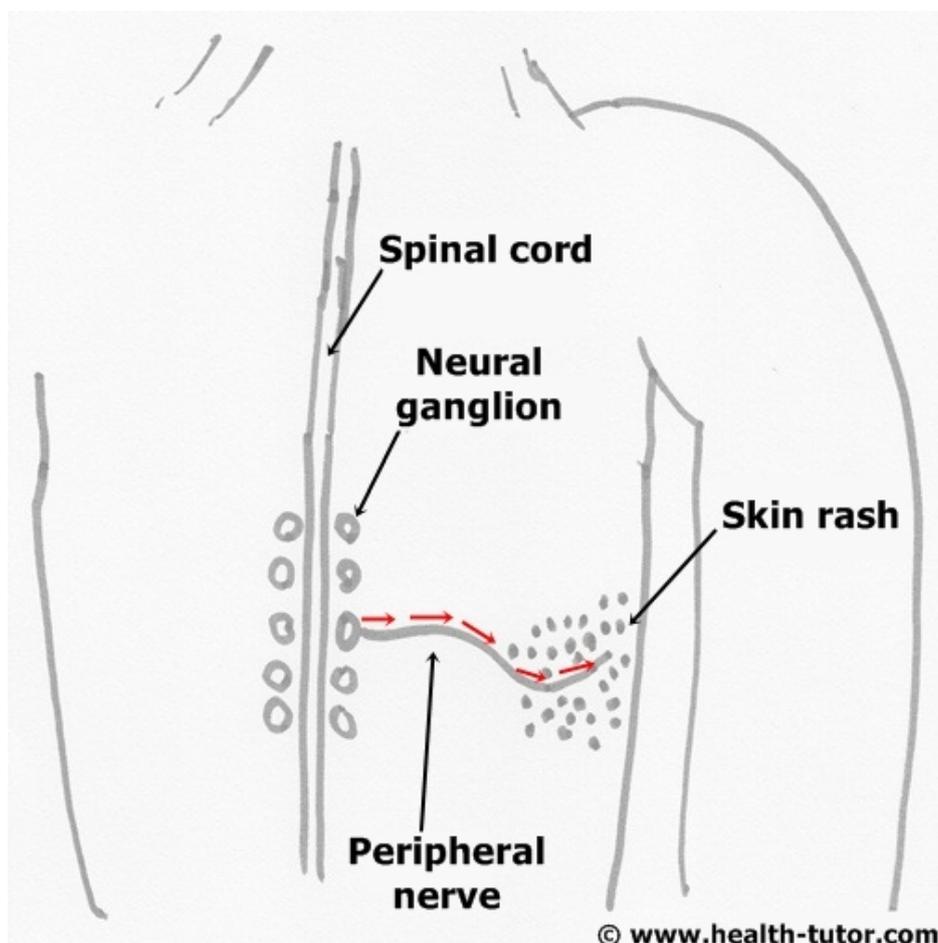
# Shingles

Shingles or herpes zoster is skin (more precisely nerve) affection. Although it is not a life-threatening condition, it can seriously complicate the life and annoy the patient with strong and chronic pain.

## Causes

The disease is infectious and it is caused by the varicella-zoster virus. The first contact with the virus causes disease known as [chickenpox](#). In children, it is not a serious affection and it manifests with [fever](#) and skin rash. Its symptoms disappear quite quickly, but our immune system is unable to completely remove the virus. The viral particles escape the immune response and hide within the neural ganglia (clusters of nerve cells) located near the spine. These ganglia take information about touch, heat, cold and pain from the skin and subcutaneous tissue.

When the [immune system gets weakened](#) (other infections, drugs dampening the immune system, stress and mental strain, etc.), the virus reactivates and spreads out of the ganglia by the nerve fibers into the skin and affect a skin area, which is innervated by the affected nerve. This time, the virus does not cause [chickenpox](#), but the shingles.



## **Scheme of viral spread from neural ganglia towards the skin (red arrows = direction of spreading)**

### **Symptoms**

The main sign of shingles is sharp pain in the skin area belonging to the affected nerve. The pain and its perception are quite individual. It can be very strong, burning and shocking. In the first moments, it may easily lead to misdiagnosis. For example, chest shingles may mimic an acute [heart attack](#). After several days of pain, there occurs a skin rash, which is also limited to the skin area belonging to the affected nerve. The rash may be complicated by occurrence of small [blisters](#) and vesicles and it can persist for few weeks. However, the pain may persist for months after the rash disappeared.

In some cases, the pain and rash may appear in the face and around the eye. Eye affection is very serious and requires intensive therapy by antiviral drugs. Without the treatment, there may occur irreversible eye damage with [blindness](#).

### **Prevention**

The only prevention is avoidance of excessive stress, exhaustion and other factors disrupting the immune system. People who are deliberately [immunosuppressed](#) by certain medications may be preventively given antiviral drugs.

### **Diagnosis**

Before the occurrence of the rash, the diagnosis is not easy. However, when the rash occurs, the diagnosis can be stated by any experienced doctor.

### **Treatment**

The therapy is usually administered by neurologists and dermatologists. The virus belongs among the group of herpes viruses and these viruses can be treated by antiviral agents such as the substance aciclovir. However, the therapy has the best effect when started as soon as possible after the occurrence of the first symptoms. Antiviral drugs may be used as oral tablets and in severe cases they may be administered in the intravenous form.

Mild forms of shingles are sometimes treated only symptomatically by skin ointments that dry the rash and by various [painkillers](#). As the pain is primarily of a neural origin, various [antiepileptic drugs](#) have proven to have a great effect.

Note: Particularly (but not only) in the elderly patients with more extensive forms of shingles, it is

advisable to look for a cause of the immune disruption that allowed the virus reactivation. It is especially wise to perform some basic examinations to exclude the presence of a [malignant disease](#).