Zoster neuralgia (shingles) and postherpetic neuralgia

**How do zoster and postherpetic neuralgia develop? [1, 2, 3, 4]**

1. **Chickenpox** (viral infection)
2. Virus remains dormant in spinal ganglion
3. Virus is reactivated (by injury, stress, weak immunity)
4. Nerve is inflamed

   Pain, sensitivity impairments and tingling
   Within days reddening of skin and formation of blisters: **herpes zoster**
   Further nerve damage by the virus
   Changes in the peripheral nerve
   Postherpetic neuralgia

**Sympathetically maintained pain is common!**

**Treatment of zoster neuralgia [1, 4]**

- **Virostatics Painkillers**
- **Cooling and zinc paste**

**Treatment of postherpetic neuralgia [4, 5]**

- **Lidocaine medicated plaster**
- **Painkillers and co-analgesics** (antidepressants, which support the body’s own inhibition of pain, and anti-epileptics, which stabilise the nerve membranes)
- **TENS**
- **Relaxation**
Zoster neuralgia (shingles) and postherpetic neuralgia

A How do zoster and postherpetic neuralgia develop? [1, 2, 3, 4]

After a chickenpox infection in childhood, the Varicella zoster virus remains dormant in the spinal ganglia (these are collections of nerve cell bodies in the posterior nerve root of the spinal cord) (1).

These viruses are reactivated in approximately 215 of 100,000 persons per year (2).

The viruses then cause inflammation in the corresponding nerve, initially leading to pain, abnormal sensations and tingling (3).

After one to two days – but occasionally even later – the typical symptoms of herpes zoster (shingles) develop: skin reddening and blistering (4) [2]. Acute shingles generally heals after two to four weeks.

In approximately one in five cases of shingles the inflammation of the nerve leads to substantial nerve damage – even more if the acute phase is not adequately treated and in elderly patients [4].

Complex remodelling processes occur in the nervous system, leading to postherpetic neuralgia with severe neuropathic pain, which occurs after the acute shingles has healed and can persist for one month to many years.

B Treatment of zoster neuralgia [1, 4, 5]

Virostatics (medicines used to prevent proliferation of viruses) play a crucial role. Use of these medicines lowers the risk of the viruses spreading further and consequently causing postherpetic neuralgia.

The pain is treated with painkillers (analgesics) and co-analgesics (antidepressants to support the body’s own inhibition of pain and anticonvulsants [= antiepileptics] to inhibit the excitability of the nerve cells and transmission of stimuli in the brain and spinal cord).

Cooling and zinc paste inhibit inflammation.

C Treatment of postherpetic neuralgia [4, 5]

Once postherpetic neuralgia has developed, virostatics are ineffective.

A lidocaine medicated plaster can be applied to the painful area for effective pain relief.

Further measures are painkillers and co-analgesics, TENS (transcutaneous electrical nerve stimulation) and relaxation techniques.