Fact Sheet SHINGLES

(Zoster)



Shingles, also known as zoster, is a common and debilitating disease that affects the nerves and the cutaneous area around, which explains the main symptoms pain and rash.

It is caused by the reactivation of the varicella-zoster virus, the same virus that causes chickenpox and that we host in our body after chickenpox resolution. So shingles is not like other infectious disease because you don't catch it. The virus is already inside.

After an attack of chickenpox, usually in childhood, the varicella-zoster virus stays in a dormant state within the nervous system.

The immune system keeps the virus in check and prevents it from awakening.

It is not fully known what causes the virus to reactivate. Anyone who has had chickenpox can develop shingles later in life at any time'.

Who gets shingles?

In Europe, nearly all adults (>95%) have had chickenpox and are therefore at risk of developing shingles².

It is not possible to predict who will suffer from shingles but as we age, our immune system naturally weakens, so the chance of developing shingles increases.

Shingles mainly strikes people aged over 50^{3,4,5}.

The risk of developing shingles more than doubles after the age of 50 years and 2/3 of shingles cases occur after the age of 50 years^{3,4,5}.

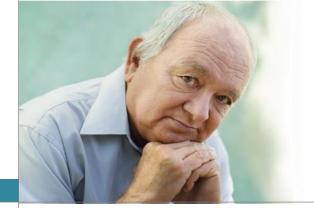
Epidemiologists estimate that around 1 in 4 people in Europe will suffer from shingles during their life^{6,7} and the risk rises to 1 out 2 for those who live to age 85 or older8.

It is estimated that around 1.8 million new shingles cases occur in Europe each year4.

Incidence of shingles seems to be increasing worldwide and in Europe^{9,10,11}

As the risk of zoster is known to increase with age, the ageing population means the burden of this disease will continue to grow.

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Shingles is not just a rash¹²

- The virus reactivates in the nervous system and replicates along the nerves to the skin
- Early symptoms of the disease may include headache, tiredness and feeling generally unwell.
- A painful area develops on the skin which can give people a burning or shooting pain with tingling and itching.
- Within a few days, this area of pain will become a red rash, which turns into fluid-filled blisters. When the blisters burst, they turn into sores that eventually crust over and heal.



 Shingles strikes usually on one side of the upper body or on the face, neck, or the eye.

 Most people suffer burning, stabbing nerve pain that can be constant or intermittent. In severe cases, this pain can be excruciating.

Most people recover in 2-4 weeks and have no further symptoms, but for some people shingles can lead to potentially serious complications.

Burden of disease

Shingles or Post herpetic Neuralgia (severe chronic nerve pain that may follow) can have a profound negative impact on patients'lives, and interferes with many aspects of their daily living ^{13,14}.

The long duration of post herpetic neuralgia makes this complication particularly disruptive to sufferers¹⁵

The consequences of this can lead to depression, incapacity or isolation 15.

In some people with chronic conditions and polymedication, shingles can be the potential start to a cascade of life-altering events¹⁶.



¹² Johnson R, Patrick D. Introduction to herpes zoster and future directions. In: Improving the Management of Varicella, Herpes Zoster and Zoster Associated Pain. International Herpes Management Forum, 2002; p.46-57.

13 Johnson RW, Bouhassira D, Kassianos G, et al. The impact of herpes zoster and post-herpetic neuralgia on quality-of-life. BMC Med. 2010;8:37

14 Oster G, Harding G, Dukes E et al. Pain, medication use, and health-related quality of life in older persons with postherpetic neuralgia: results from a population-based survey. J Pain 2005;6:356-63

15 Drolet M, Brisson M, Schmader KE, et al. The impact of herpes zoster and postherpetic neuralgia on health-related quality of life: a prospective study. CMAJ. 2010;182(16):1731-6

16 Haut Conseil de la santé publique. Avis relatif à la vaccination des adultes contre le zona avec le vaccin Zostavax® 25 octobre 2013. http://www.hcsp.fr/explore.cgi/avisrapportsdomaine?clefr=390

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Common complications of shingles

As a person recovers from shingles the pain usually resolves as the rash heals, but for some people shingles can lead to severe complications.

Post herpetic neuralgia

The most common complication is called post-herpetic neuralgia (PHN), which is persistent nerve pain in the area of the shingles rash that some people experience after the rash has healed².

The pain is due to nerve damage caused by the virus when it passes along the nerves to the skin.¹⁷

Post-herpetic neuralgia is a very distressing, long-lasting pain that can feel like a burning, stabbing or throbbing sensation².

For some people, post herpetic neuralgia can be so severe that it stops them living a normal life - even a slight breeze against the skin can be painful and distressing².

Severe nerve pain can last weeks, months or even years¹⁸.

Around 25% of HZ patients aged 50 develop long-lasting neuropathic pain called post-herpetic neuralgia (PHN)*, and this increases to 50% in those aged 70 years^{2,19,20}

2/3 of Post herpetic Neuralgia cases affect people age 65 years and over^{5,18}

* defined as pain occurring or persisting at least 3 months after the HZ rash or pain onset

Post-herpetic neuralgia is the most common complication of shingles but it is hard to predict who will suffer from this long lasting nerve pain and how severe it will be.

However the likelihood of getting it and the length of time you suffer from it increases markedly with age^{5,18}

Damage to vision

Another complication can occur in the 10-20% of people who suffer from shingles developing in the eye and/or the skin of the eyelid²¹. This type of shingles, known as ophthalmic shingles, can be very painful

17 Schmader K. The epidemiological, clinical and pathological rationale for the Herpes Zoster vaccine Info: J Infect Dis 2008; 197: S207-15
18 Helgason S et al. Prevalence of post-herpetic neuralgia after a single episode of Herpes zoster: prospective study with long term follow-up Br Med J 2000; 321: 1-4.)
19 Scott FT et al. A study of shingles and the development of postherpetic neuralgia in East London. J Med Virol. 2003; 70 Suppl 1: 524-530
20 Dworkin RH, Schmader KE. Chapter 5 - The Epidemiology and Natural History of Herpes Zoster and Postherpectic Neuralgia. In: Watson CPN, Gershon AA. Pain Research and Clinical Management. Amsterdam, The Netherlands: Elsevier Science B.V.; 2001. p. 39-64
21 Cunningham AL, Breuer J, Dwyer DE, et al. The prevention and management of herpes zoster. Med J Aust -2008;188(3):171-6



and causes frequent chronic ocular disease or even a permanent loss of vision of the affected eve²².

Other complications and hospitalization

Shingles can also lead to other complications like scarring, skin superinfections, nerve palsies and depending on localization permanent hearing loss or brain inflammation (encephalitis)²³.

Moreover, recent epidemiological studies revealed an increased risk of stroke after zoster, with a higher risk in the month following the event and also in case of ophthalmic zoster. Stroke is likely a direct effect of virus infection in the arteries (VZV vasculopathy). 24,25,26,27

Advancing age increases the risk of hospitalization²⁸. In rare case, shingles can cause death, most often in older people²⁹

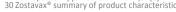
Treatment and prevention of shingles¹²

An episode of shingles cannot be cured. Medicines can be given to help shorten the duration and severity of the attack but to be effective they need to be started within 72 hours of the rash appearing. Many people are not able to get a diagnosis and begin treatment within such a short time 12.

Medicines can also be given to limit the pain caused by shingles but pain control is often unsatisfactory. Ordinary painkillers have very limited effect on Post herpetic neuralgia whose management usually requires a complex combination of stronger treatments. For some people with other pathologies, this can result in drug interactions and significant side effects⁴.

Prevention against shingles is now possible. A vaccine called Zostavax[®] is now available for the prevention of shingles and the long lasting nerve pain that may follow the disease, post-herpetic neuralgia. (to adapt locally and regarding media target)

Zostavax® is licensed in Europe for the vaccination of adults of 50 years or older and can be given as a single injection³⁰





²² Pavan-Langston D. Ophthalmic zoster. In: Arvin AM, Gershon AA, eds. Varicella-Zoster Virus: Virology and Clinical Management. Cambridge, UK: Cambridge University Press; 2000:276-298. 23 Galil K, Choo PW, Donahue JG et al. The sequelae of herpes zoster. Arch Intern Med 1997;157:1209-1 24 Langan SM, Minassian C, Smeeth L, et al. Risk of stroke following herpes zoster: a self-controlled case-series study. Clin Infect Dis. 2014;58(11):1497–1503. 25 Sreenivasan N, Basit S, Wohlfahrt J, Pasternak B, Munch TN, et al. (2013) The Short-and Long-Term Risk of Stroke after Herpes Zoster -A Nationwide Population-Based Cohort Study. PLoS ONE 8(7): e69156. doi:10.1371/journal.pone.0069156. 26 Lin HC, et al. Herpes zoster ophthalmicus and the risk of stroke: A population-based follow-up study. Neurology 2010;74;792-797. 27 .Kang. JH, et al. Increased Risk of Stroke After a Herpes Zoster Attack A Population-Based Follow-Up Study, Stroke. 2009;40:3443-3448. 28 Edmunds WJ, Brisson M, Rose JD. The epidemiology of herpes zoster and potential cost-effectiveness of vaccination in England and Wales. Vaccine 2001;19:3076-90 29 Gilden D, Mahalingam R, Nagel MA, et al. The neurobiology of varicella zoster virus infection. Neuropathol Appl Neurobiol. 2011;37(5):441-63 30 Zostavax* summary of product characteristics