Shingles occurs most commonly in older age groups, and can cause severe pain.

**Cause**

Reactivation of the virus which causes chicken pox (varicella-zoster virus VZV).

After developing chickenpox, the virus lies dormant in the dorsal root or trigeminal ganglia and can become reactivated later in life to cause shingles.¹

**Features**

Generally, shingles presents as an acute, self-limiting vesicular rash which is often painful and lasts around 10–15 days.

The rash is usually unilateral, most commonly affecting the lumbar or thoracic dermatomes. The virus works down the nerves that branch out from the spinal cord.

**EARLY PHASE:** In 80% of cases, early phase occurs 2–3 days before the rash².

Early symptoms may be severe pain, itching and numbness around the affected areas. This may be accompanied by headache, photophobia and malaise.

**Complications**

- Severe pain (where the rash was) known as post-herpetic neuralgia (PHN):
  - Persistent chronic neuropathic pain which persists for more than 90 days from the onset of the rash.
  - Can interfere with carrying out everyday activities and can be difficult to treat.
  - Increased risk of PHN with age: affects around 30% of people with shingles over 80 years of age⁶.

- Serious complications involving the eye.

- Very rarely, shingles can lead to pneumonia, hearing problems, blindness, encephalitis or death.

**Transmission**

Shingles cannot be passed from one person to another. However, a person with shingles can pass the varicella zoster virus to a person who has never had chicken pox or who has not had the chickenpox vaccine. In such cases, the person exposed to the virus may develop chickenpox but not shingles.³

The virus is spread by direct contact with the fluid contained in the blisters, which can transfer to sheets and clothing.

Until the blisters scab over, the person is infectious. Counsel patients to avoid contact with people who have a weakened immune system, newborns and pregnant women while contagious.

Shingles is less contagious than chickenpox and the risk of a person with shingles spreading the virus is low if the rash is covered.

**Who is at risk?**

In a national serosurvey conducted in 2007, more than 95% of the adult population in Australia had antibodies to VZV by the age 30, indicating that they had been previously infected with the virus.⁴ Therefore almost the entire adult population is at risk of shingles.

Shingles occurs most commonly in people of older age (particularly ≥50 years of age).⁵

**The role of the GP**

You play an active role in protecting thousands of older Australians who are at risk of shingles complications.

The Shingles Prevention Study (SPS) was conducted among 38,546 adults aged ≥ 60 years and showed that compared to placebo vaccination with Zostavax reduced:

- Herpes zoster (HZ) by 51.3%
- Post herpetic neuralgia by 66.5%
- Burden of illness associated with HZ by 61.1% over a median of more than three years follow-up.⁷

- ADVISE PATIENTS about the importance and safety of vaccination, obtain medical history prior to vaccination with zoster vaccine, and check contraindications of zoster vaccine in IMMUNOCOMPROMISED individuals.³

- Be on the lookout for DIAGNOSIS, and provide early MANAGEMENT.
PREVENTION

Preventing herpes zoster is the best way to avoid post-herpetic neuralgia and other complications. The zoster vaccine (Zostavax) for use in Australia is a live attenuated vaccine, registered for use in people aged 50 years and older.

Who should be vaccinated?

• All adults 60 years and older who have not previously received a dose.
• Household contacts (≥ 50 years of age) of a person who is, or who is expected to become immunocompromised.

FREE FOR ALL ADULTS AGED 70 YEARS through the National Immunisation Program (NIP). A single catch up dose will be funded under the NIP for adults between 71–79 years of age until October 2021. People in this age group have a high likelihood of developing shingles and PHN. The vaccine efficacy against PHN in this age group is 67%.7

Vaccination of other age groups (e.g. those aged 50–69 or 80 years and over) is available on prescription and can be purchased by patients.

Vaccine safety

Zostavax is safe and well tolerated. Some people may experience a headache, fatigue or soreness around the site where the shot was given. The reaction is typically mild and resolves within a few days.

Can I give zoster vaccine on the same day as other vaccines?

Yes, all inactivated or live vaccines (including any of the available pneumococcal vaccines) may be co-administered with zoster vaccine (using separate injections and injection sites). If zoster vaccine is not given on the same day as other live viral vaccines (e.g. MMR, yellow fever) separate administration by 4 weeks is recommended.5

Who should NOT receive the zoster vaccine?

• Pregnant women
• Previous anaphylaxis to the vaccine (either Zostavax or varicella vaccine) or its components.5

• People who are severely immunocompromised through:
  – Primary or acquired immunodeficiency (haematologic neoplasms, post-transplant; HIV/AIDS; other significantly immunocompromising conditions)
  – Immunosuppressive therapy: current or recent (chemotherapy, radiotherapy, high-dose corticosteroids, biologics and most disease-modifying anti-rheumatic drugs).

In persons who are or have recently been immunocompromised, the safety of administering zoster vaccine should always be considered on a case-by-case basis. If there is uncertainty around the level of immunocompromise and when vaccine administration may be safe, vaccination should be withheld and expert advice sought from the treating physician and/or an immunisation specialist.

TREATMENT

Antiviral treatment (famciclovir, valaciclovir or acyclovir*) may help to reduce pain and shorten the duration of shingles. The treatment is best taken within 72 hours of the onset of the rash but may still be helpful if taken after this time.

*There is evidence that famciclovir and valaciclovir are more effective than acyclovir in reducing acute pain in patients with herpes zoster.

REFERENCES

1. Zoster vaccine for Australian adults/NCIRS Fact sheet: August 2017