Test your knowledge

More then 10% of people suffer an episode of herpes zoster (shingles) during their lifetime – for some of these people, postherpetic neuralgia will have a devastating effect on their quality of life. Every GP needs to know how to diagnose and manage this common complaint.

The multiple choice questions in this quiz may have more than one answer.

1. Which disease is the precursor of herpes zoster?
a. mumps
b. measles
c. chickenpox
d. genital herpes
e. cold sores

2. Which virus is responsible for herpes zoster?
a. parvovirus
b. varicella-zoster virus
c. measles virus
d. coxsackie type B virus
e. rubella virus

3. Which of the following increase a person's risk of having an attack of herpes zoster?
a. chemotherapy
b. HIV infection causing AIDS
c. age over 60 years
d. contact with a child who has chickenpox
e. development of a cold sore

4. The rash of herpes zoster follows a number of patterns. Which of the following are commonly seen?
a. unilateral rash in immunocompetent people
b. rash affecting the thoracic region
c. involvement of two or three adjacent dermatomes
d. facial lesions following the ophthalmic division of the trigeminal nerve
e. rash affecting the genital region

5. Which of the following are potential neurological complications of herpes zoster?
a. ophthalmoplegia due to herpes zoster of the third cranial nerve
b. transverse myelitis
c. encephalitis
d. optic neuritis
e. facial nerve palsy

6. Which of the following statements is true of infection with varicella-zoster virus?
a. the skin lesions of herpes zoster are not infectious
b. it is impossible to have more than one episode of herpes zoster in a lifetime
c. about 5% of people who suffer from herpes zoster have a second episode at some stage
d. herpes zoster always causes rash, and herpetic pain cannot occur without skin lesions
e. prodromal symptoms do not occur

7. Which of the following are true of treatment for herpes zoster?
a. there is no way to reduce the acute pain beyond providing pain killers
b. antiviral drugs (oral aciclovir, famciclovir and valaciclovir) are helpful in reducing the course of the attack if started within 72 hours of the onset of the rash
c. administration of varicella-zoster vaccine within 72 hours of the development of the rash will reduce acute pain
d. oral prednisolone (60 mg/day, reduced over about three weeks) is helpful in some patients

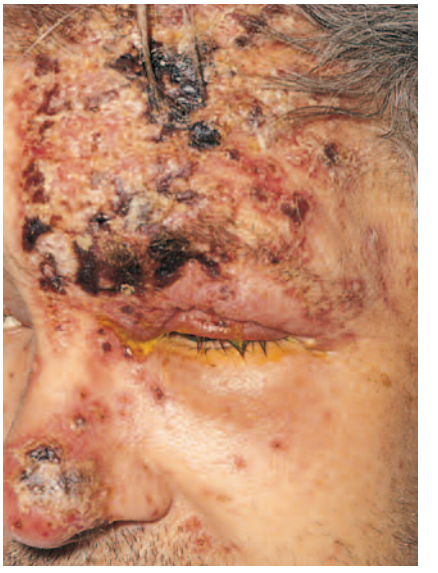

Figure. A severe case of herpes zoster ophthalmicus with the rash in a crusted healing phase.

e. a steroid-based cream should be applied to the skin in the area of the rash

8. Treatment of postherpetic neuralgia is difficult. Which of the following statements are true of this dreaded complication?
a. it is generally defined as pain present for at least six months after an attack of shingles
b. it is generally defined as pain present for more than one month after the onset of the rash
c. it occurs in immunocompromised people only
d. it is more common in elderly people
e. it can usually be prevented by antiviral medication.

Reference

1. Looke, DFM. Revisiting herpes zoster – updating management. Mod Med Aust 1999; 42(4): 67-78.

Answers appear on the inside back cover

Clinical quiz answers

(to questions on page 75)

1. c
Chickenpox is the initial phase of the viral infection that can reactivate as herpes zoster after a variable latent period.

2. b
Herpes zoster is caused by reactivation of the varicella-zoster virus lying latent in the ganglia.

3. a, b, c
Herpes zoster is 8 to 10 times more likely to occur in people over 60 years of age and people who are immunocompromised in some way (for example, as a result of receiving chemotherapy or having AIDS).

4. a, b, d
The rash of herpes zoster is unilateral in immunocompetent people (in immunocompromised people it can cover the body). The thorax is the most commonly affected region. The face is the second most commonly affected region – the ophthalmic division of the trigeminal nerve is the most commonly involved nerve in the face, and the associated keratitis can cause blindness. In most cases of herpes zoster, one dermatome is involved; occasionally, however, up to three adjacent ones may be involved.

5. a, b, c, d, e
Neurological complications of herpes zoster are many, but rare. The signs and symptoms depend on the site involved, which can include the brain and spinal cord as well as the cranial nerves and dermatomes.

6. c
The skin lesions of herpes zoster are infectious, and a susceptible person can catch chickenpox from a person with shingles. Rarely, pain can occur without rash. About 5% of people have a second episode at some stage – a patient's immunity should be assessed if the two attacks occur in close succession. Prodromal symptoms are common, and include fever, malaise and dysaesthesias over the affected dermatome.

7. b, d
The appropriate treatment for herpes zoster is an antiviral medication, administered within 72 hours of the development of the rash. Aciclovir, famciclovir and valaciclovir are licensed for this purpose in Australia. Prednisolone, given at a dose of 60 mg/day and quickly reduced, has been shown to be of use in some people. A steroid-based cream applied to the rash is not helpful.

8. b, d
Postherpetic neuralgia is generally defined as pain that continues for more than one month after the development of the rash. Unfortunately, even appropriate use of antiviral medication (i.e. treatment commencing within 72 hours of the appearance of the rash) does not necessarily prevent postherpetic neuralgia from developing; delayed use will certainly not help. It most frequently develops in elderly, immunocompetent people.