

Eye see (answers on page 34)

Part one

Abby, aged 65, a schoolteacher with a very healthy history, has come to you for a routine health check before retiring from work. Her only complaint was that she had had a recent chest infection that had lasted longer than usual (she is an ex-smoker), but that she otherwise felt well. However, you notice that her right upper eyelid droops more than her left, and that her left iris is more dilated than her right one. Asked about this she explains that her 'eyes have been like that for a few years now and she isn't bothered by them'. She has not lost weight recently and has no history of eye disease.

- Q1 You are more concerned with her eye signs than her chest problem: which of the following questions would you ask to further your initial differential diagnosis?**
- Have you noticed any lack of sweating in a part of your face?
 - Have you ever had double vision?
 - Do you remember any injury to your neck or head?
 - Have you had headaches or neck pain?
 - Have you ever been bitten by a snake?

Part two

- Q2 What are the differential diagnoses in a person presenting in later life with ptosis and anisocoria (unequal pupils), but no acute illness or condition?**
- Benign Horner's syndrome.
 - Brainstem or spinal cord disease.
 - Disease in the lung apex, brachial plexus or neck.
 - Disease in the middle ear, cavernous sinus or orbit.
 - Carotid artery dissection.

Part three

- Q3 Shining a light into her eyes revealed that the right pupil (the narrower one) dilated more slowly with the light than the left one. However, both pupils did react to light and accommodation, and the pupils were both evenly round. The iris colour was the same in both eyes. She had 6/6 vision in each eye, normal intraocular pressures and healthy optic discs. She did admit that the side of her face with the ptosis 'feels drier' than the other side. Which of the above diagnoses do these findings make extremely unlikely?**
- All but benign Horner's syndrome.
 - None of them.
 - Carotid artery dissection.
 - Central nervous system disease.

Part four

- Q4 A drop of 1% apraclonidine was applied to both eyes. Within one hour the constricted pupil dilated and the ptosis improved substantially. Which of the following investigations do you think are now needed to establish the diagnosis?**
- Urgent CT or MRI scans of the brain.
 - Similarly urgent scans of the cervical and upper thoracic spine.
 - The scans can be ordered but there is no urgency – a six week delay is acceptable.
 - Chest X-ray.
 - Further tests can be delayed until after a detailed neurological review.

Part five

- Q5 Aside from Abby's case, if ptosis and pupillary change occurs acutely in an adult, which of the following must you rule out?**
- There may still be no apparent cause.
 - Tumours in the central nervous system.
 - Lung cancer.
 - Carotid artery dissection.
 - Neck trauma.
 - Snake bite.
 - Chronic sinusitis and orbital infection.