



Droopy eyelid

Eye series 2

A 75 year old man presented to the practice complaining of an increasingly droopy eyelid over the past 12 months. It appears worse toward the end of the day when he is tired. He is on no current medication and has had no previous eye surgery. Pupil reactions are normal and no abnormalities are noted on ocular movement examination.



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Question 1

What clinical features will help lead to a diagnosis?

Question 2

What are the differential diagnoses?

Question 3

What is your final diagnosis?

Question 4

Would you request further diagnostic tests, and if so, which tests?

Question 5

What factors will influence the course of treatment?

Answers

Answer 1

A concise history is essential. The patient history will provide important clues to the aetiology of the condition. 'Droopy eyelids' or ptosis can be classified as either congenital or acquired. Furthermore, ptosis can be subclassified as aponeurotic, myogenic, neurogenic, traumatic or mechanical in origin. Classification will aid the differential diagnosis of the condition and ultimately determine treatment options. General health and in particular, previous eye history, should be noted.

Once the ptosis is determined as acquired, further questioning is necessary. The duration and progression of the condition is vital. Family photos may be a useful aid in pin-pointing origin and change. The presence of associated symptoms such as double vision, fatigue, dysphagia or jaw winking will also serve to assist diagnosis and future management.

Observation of facial expression, tone of voice and gait will provide clues of any

possible neurological changes. Close ocular examination is essential. Lid muscle (levator) function, pupil and extra ocular movement testing will provide positive clues to the aetiology. Lid position in primary and downgaze is also important to note.

Answer 2

Differential diagnoses may include a defect in the aponeurosis of the levator muscle, Horner's syndrome, partial or full-third nerve palsy, ocular myopathy and myasthenia gravis.

Horner's syndrome is usually characterised by minimal ptosis changes, miosis, enophthalmos and anhidrosis. Third nerve palsies will also likely have pupil changes concurrent with the ptosis. A full-third nerve palsy will represent a complete ptosis of the upper eyelid. Strabismus and possibly double vision may also be present when the lid is raised.

Ocular myopathies are usually symmetrical in nature and are often associated with other broad changes such as muscle weakness.

Poor or no ocular movements, especially during later stages are common findings. Myasthenia gravis is relatively uncommon. Variable ptosis and diplopia are usually the initial and common traits of this condition. Fatigability of the ptosis is also a distinguishing feature. This condition is confirmed by an increase in strength following an injection of edrophonium chloride into the lid (Tensilon test).

Answer 3

The ptosis is asymmetrical. There are no signs of extra ocular muscle or pupil anomalies. General health is good. There is no previous history of eyelid trauma or surgery. The patient is likely to have dehiscence of the levator aponeurosis. The aponeurotic ptosis is characterised by varying ptosis, worsening at the end of the day (as Müller muscle fatigues). A higher skin crease of the affected eyelid and deeper upper sulcus (or recess of the eyelid) is seen on examination. Commonly an increased translucency of the eyelid can also be noticed.

The most common cause is involutional changes in which the aponeurosis muscle stretches over time and areas of dehiscence occurs, therefore it is relatively common in the older population. These changes though can also occur due to chronic inflammation of the eyelid and through contact lens use, especially in cases of hard or rigid contact lens use. Excessive rubbing of the eyelids has also been listed as a contributing cause.

Answer 4

Because of the diagnosis no further external tests are required although a drop of phenylephrine (2.5%) will correct the ptosis and confirm the diagnosis. Muscle function testing, X-ray or MRI scans may be useful in those situations where diagnosis is in doubt. However, these are expensive tests and should only be used when necessary.

Answer 5

Often the patient will complain of increasing ptosis which may interfere with the superior field of vision especially later in the day. Similarly the patient may mention that afternoon or night time reading becomes tiresome causing further asthenopic symptoms.

If symptoms persist surgery may be indicated. Surgery in aponeurotic cases is successful in approximately 85% of cases. Treatment is aimed at restoring cosmesis and symmetry to the eyelids. Adequate lid function and blink without producing complications such as lid notching or distortion is also important.

The absence of Bells phenomenon in which the eye rolls up into the orbit when the lid closes, increases the risk of corneal exposure therefore a modified surgical and postoperative approach is necessary.

Further reading

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