

Ptosis (drooping) of the upper eyelid



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(1) What is 'Ptosis'?

Ptosis describes a drooping of one or both upper eyelids.

(2) What are the causes of ptosis?

Ptosis may be present at birth (congenital ptosis) or be acquired later in life. Congenital ptosis is due to an abnormality of the muscle which lifts the eyelid (the levator muscle). In this case, the muscle neither contracts or relaxes normally. Acquired ptosis has many causes, but include the following:

- Age- related: With time the deep attachment of the muscle within the eyelid becomes weakened, leading to a droopy lid.
- Neurological disease: Ptosis can be due to impairment of the nerves which control the muscles which elevate the eyelid. Disease occurring anywhere along their course between the brain and the eye socket can cause ptosis.
- Muscle disease (myopathy): Inherent diseases of the muscle (which may affect the levator muscle and the muscles which move the eye and the face) are rarer, and may also cause double vision.

(3) What are the symptoms of ptosis

Ptosis does not tend to cause symptoms until the lid impinges on the visual field (peripheral vision). As it progresses, it may cover the visual axis and obstruct central vision. These symptoms tend to be worse when looking upwards, or when tired. A compensatory effort is made to raise the eyelids by elevating the brows, and this can in itself lead to an ache over the brows.

(4) Is ptosis a serious condition?

In itself, a drooping upper eyelid does not pose a serious threat to the eye. However, ptosis may rarely be an indication of potentially serious neurological disease, or of a generalised facial muscular disease, and for this reason all patients with a ptosis should be assessed.

(5) What is the treatment for ptosis?

If ptosis causes significant asymmetry or begins to impinge on the visual field, surgery may be considered. The appropriate operation, and the degree to which the lids should be lifted, depends upon the underlying cause and the examination findings, in particular the health and natural lubrication of the front surface of the eye.

In the most common form of ptosis, which is age-related, surgery takes about one hour and is typically undertaken as a day case with local anaesthesia (with or without sedation). This operation involves making a fine incision in the lid and advancing the levator muscle within the eyelid with absorbable sutures. A dressing is placed for a day, and antibiotic drops, ointment and lubricants are prescribed to reduce the risk of postoperative infection and dryness. A review is arranged for 1 week after surgery.

Where the ptosis is due to a myopathy, more complex surgery may be required using a deep suspensory material which links the eyelid to the eyebrow.

(6) Progress after surgery

Eyelid swelling (with a slightly low lid) and a degree of bruising is common after surgery, but typically settles within 5 – 10 days and can be reduced with cold compresses or ice packs. Occasionally, the sensation within the eyelid can be disrupted, with a gradual return to normal sensation over several weeks. In the event that there is significant over or under-correction, further corrective surgery may be required.

(7) Risks of ptosis surgery

All operations carry risks; in ptosis surgery the most common ones are under-correction and overcorrection, recorded to occur in up to a fifth of all patients, despite a satisfactory appearance during surgery itself. Of the two, under-correction (persistent drooping, or recurrent drooping some weeks after surgery) is the most common. Overcorrection is less common, but more serious because of the increased risk of ocular dryness, and failure to close the eye completely when sleeping. Each of these can be corrected, if necessary, with further surgery, each carrying a risk again of over or under correction.

In patients with congenital ptosis or myopathy, further risks include the inability completely to close the eye whilst sleeping, and a lid which remains relatively high on down gaze ('hang-up'). In the latter group, dryness of the ocular surface is a particular risk because the movement of the eye may also be reduced (the eye tends to 'look up' when asleep ('Bell's phenomenon'), and the strength of eye closure may similarly be affected. Thus, all patients undergoing ptosis surgery require review within a week after surgery, and again a few weeks later.