



London Ophthalmology + Ophthalmic Plastics

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Ptosis Repair

What is Ptosis?

Ptosis (or Blepharoptosis) is the medical term for a droopy eyelid. This droop can be congenital or acquired later in life, can affect one or both eyes and there are different types of this condition, which affect both children and adults. Occasionally a slight congenital ptosis may not present a problem until later in life as the muscle weakens with aging.

Congenital ptosis is due to an intrinsic disorder of the muscle which raises the upper eyelid (*levator muscle*). In such cases, individuals are born with a poorly developed muscle and is not uncommonly a problem in both eyes (but often to different extents and can therefore present as only a complaint on the worse eye). Occasionally children's vision on the affected side may be reduced. A baby or child with congenital ptosis will need regular monitoring of his/her vision. Surgery may be recommended if the vision is not developing normally due to the ptosis.

In adults, ptosis repair surgery is almost never an emergency but should be decided after consultation and a consideration of its risk and benefits. There are several causes of acquired ptosis. Though injuries and some medical conditions which affect the nerves or muscles can lead to ptosis, the commonest cause is known as *aponeurotic ptosis*. This is when the internal grip of the levator muscle on the eyelid slips leading to the resting open position of the eyelid being lower than it originally was. Though this type of ptosis is typically seen in elderly people, it can affect adults of all ages. Long term use of contact lenses can also lead to ptosis by a variety of mechanisms.

A distinction here should be emphasised between the different scenarios where people may use the term 'droopy eyelid'. Ptosis, or true droopy upper lid (to which this article refers) should be distinguished from puffy upper eyelids showing excess skin hooding or bags (dermatochalasis) or droopy eyebrows. It is of course fairly common that a combination of the three above issues coexist, but a careful assessment will allow for the treatment to be optimised and when necessary or desirable, combined.

There are several techniques employed for repairing a eyelid with ptosis and depending on the severity and cause of your case, a management plan will be carefully designed to include the most appropriate surgical technique, timing for the surgery and the degree of adjustment required. A discussion about whether one or two eyes require the procedure should always be carried out as it is sometimes the case that a mild, non-problematic ptosis on a patient's 'good' eye can be made more obvious after repairing the problematic side.

How is eyelid ptosis corrected?

Upper eyelid ptosis surgery works by surgically tightening the levator muscle to raise the droopy upper eyelid. There are various techniques available to tighten the levator muscle, also known as a levator resection, depending on the type and severity of the ptosis, strength of the levator muscle, and previous cosmetic eyelid surgery.

Eyelid ptosis repair can be performed through a posterior eyelid approach with incisions behind the upper eyelid (internal ptosis surgery or mullerectomy), resulting

in scar-less treatment with an excellent eyelid contour. Eyelid height correction is sometimes best performed from the front skin approach (external ptosis surgery), where the incision is hidden in the upper eye fold crease line (same incision as in standard upper blepharoplasty). In congenital blepharoptosis or ptosis due to very weak levator muscle tendons, the upper eyelid has to be linked to the forehead muscle (frontalis muscle) in order to use the forehead muscle to lift the droopy upper eyelids. This technique is called frontalis sling.

What does the surgery involve?

Upper eyelid ptosis repair can be carried out under local anaesthesia, intravenous sedation or general anaesthesia, depending on your preference and what is deemed safest. Adult surgery is usually best carried out with the patient awake, as cooperation during the procedure allows for better adjustment of the final eyelid height.

In case of external approach ptosis repair, a fine incision is designed which follow the natural lines of your eyelids – hidden in the skin creases of the upper eyelid.

The levator muscle is identified and typically shortened and sutured with fine hidden stitches on the inside of the eyelid. The skin incision is then meticulously repaired with tiny sutures which are removed 6-10 days after surgery.

At the end of the procedure, antibiotic cream is applied over this area. Mr Koutroumanos will ask you to apply a similar ointment three times a day for five to seven days post-operatively.

Bandages or padding are seldom used and if required this will almost always be applied for a short period right after the procedure and removed by Mr Koutroumanos before you head home.

An ice pack will usually be applied on your eye immediately after the procedure.

What can I expect immediately after surgery?

Recovery following upper lid ptosis repair is fairly comfortable with 1-2 weeks of variable amounts of swelling and sometimes bruising in the eyelid skin. Depending on your activities and line of work, Mr Koutroumanos will advise anywhere between 1-2 weeks of down time but most people can resume most activities within a few days.

You will be able to get up and about on the evening of the operation and minimal pain is to be expected if any, easily controlled with simple painkillers. Rest is advised for 48 hours after the procedure and any form of exercise can resume usually 3 weeks after

surgery, though it is completely safe to go for a brisk walk anytime after day 3-4.

It is important to note that the amount of bruising and swelling as well as their speed of recovery varies from individual to individual.

Both however can be improved by using cold compresses and sleeping propped upright for the first few days after surgery.

It is important to remember that you will not be able to drive or operate machinery for 48 hours after a general anaesthetic and 24 hours after intravenous sedation.

Other than the application of the ointment, wound care is not complicated. You should try to keep the wounds dry for the first 48 hours, after which period gentle washing (but no scrubbing) is safe. By the time sutures are removed, around day-6 to day-10, normal washing can be resumed. Make-up is best avoided for the first 10-14 days post-operatively.

Within 3-4 weeks, most of the eyelid swelling will have subsided. At the two month mark, minimal if any swelling is still possible. At three months, most eyelids should be considered healed and it not until 3 months after the procedure that a conclusion should be reached about the final post-operative position of the eyelid.

Are there any reported complications?

Scars There will be scars following the surgery. These will usually be red at first, then purple, and then fade to become paler over a few weeks to months. Most scars following ptosis surgery become virtually invisible. Very rarely, scars may become wider, thicker, red or painful, and you may need to have surgery to correct them. This is incredibly rare.

Bleeding Bleeding into the wound or the eye socket is very rare but possible. There have been very rare reports of uncontrolled bleeding into the eye socket resulting in visual loss.

Infection in the eyelid skin is incredibly rare. If you get an infection of the wound you may need antibiotics or another operation. This can affect the final result of the surgery.

Increased or reduced sensation After the surgery, the skin near the wound can be more or less sensitive. In rare cases, the change in sensation may be permanent.

Asymmetry This is where the eyes are not symmetrical. Almost everyone has a mild degree of asymmetry, and the mere process of undergoing eyelid surgery may make you much more aware of this.

Eyelid position During the first few days, the eyelid is heavy and swollen and likely to sit at a lower level than desired. Over the next few weeks, this will slowly adjust automatically. The final contour and resting position of the eyelid will not be possible to judge until 10-12 weeks after the procedure.

Unsatisfactory result Sometimes, patients are not satisfied with the result of their eyelid surgery. This may be to do with the look or feel of the eyelids, or the shape of the eyelids not meeting expectations. It is very important that you talk to your surgeon, before you have the surgery, about the outcome you want, and whether this can be safely achieved with a good outcome. Most internationally reported statistics mention that after ptosis surgery the final eyelid position is deemed satisfactory by 90% of patients, which suggests that a very small number of patients need another operation to get the result they want. Though success/satisfaction rate rate of ptosis surgery (needing only the one operation) in Mr Koutroumanos' practice is audited as 96%, it is clearly important for all potential complications to be considered by patients however unlikely.

Allergic reaction Rarely, allergic reactions to tape, stitches or solutions have been reported. If you have an allergic reaction you may need extra treatment.

Tips to promote recovery

When a person has any eye surgery, there are certain things to avoid and some things to do that will promote recovery. Follow these tips and any other advice provided by Mr Koutroumanos:

- 1.1. Use ice packs as recommended

- 1.2. Avoid heavy lifting, straining and swimming for the recommended time period, typically at least 2 weeks
- 1.3. Avoid smoking for at least 2 weeks prior to surgery and two weeks after. If you manage this, then you have proven to yourself you can cut down or stop smoking altogether and now is a perfect opportunity to put an end to it!
- 1.4. Do not wear contact lenses until Mr Koutroumanos says it is ok
- 1.5. Keep your head raised with a couple of pillows while sleeping for the first few days if possible
- 1.6. Avoid blood-thinning medication as per Mr Koutroumanos instructions. You will have received specific instructions on stopping these prior to surgery. Typically aspirin and clopidogrel are stopped 10 days pre-operatively, Apixaban, Rivaroxaban three days prior to surgery.
- 1.7. Clean the surgical site per instructions
- 1.8. Do not rub the eyes
- 1.9. Wear sunglasses while the wounds are healing to avoid darkening of the skin