### What Is Ptosis?



Ptosis is a drooping of the upper eyelid. The lid may droop only slightly, or it may cover the pupil entirely. In some cases, ptosis can restrict and even block normal vision. It can be present in children as well as adults and may be treated with surgery.

Ptosis can:

- Affect one or both eyelids
- Be inherited
- Be present at birth
- Occur later in life

If a child is born with ptosis, it is called "congenital ptosis." Congenital ptosis is often caused by poor development of the muscle that lifts the eyelid, called the levator muscle. This condition usually doesn't improve on its own over time. With moderate to severe congenital ptosis, the child may need treatment to have his or her vision develop normally.

What problems can result from ptosis in children?



The most serious problem associated with childhood ptosis is <u>amblyopia</u> (lazy eye), which is poor vision in an eye that did not develop normal sight during early childhood. This can occur if the lid is drooping severely enough to block the child's vision. More frequently, amblyopia can develop because ptosis tends to lead to constant blurriness of visual images, causing <u>astigmatism</u>. Ptosis can also hide misaligned or crossed eyes, which can cause amblyopia.

If amblyopia is not treated in early childhood, it may lead to permanent vision loss later in life.

# **Ptosis Symptoms**

The most obvious sign of ptosis is the drooping lid itself. Ptosis can affect one or both eyelids. It may be present at birth (congenital) or occur later in life. In congenital ptosis, the upper eyelid creases may appear asymmetrical.

Children with ptosis may also often tip their head back into a chin-up position to see underneath the drooping eyelid, or they may raise their eyebrows in an attempt to lift up the lids. Both of these positions are signs that the child is trying to use both eyes to see. Over many years, abnormal head positions may cause deformities in the head and neck.

# What Causes Ptosis?

In adults, the most common cause of ptosis is the separation or stretching of the levator muscle tendon from the eyelid. This process may occur as a result of aging, after <u>cataract surgery</u> or other eye surgery, or as a result of an injury.

Adult ptosis may also occur as a complication of other diseases involving the levator muscle or its nerve supply, such as neurological and muscular diseases and, in rare cases, tumors of the eye socket.

Congenital ptosis is often caused by poor development of the levator muscle that lifts the eyelid. Although it is usually only a problem with a drooping eyelid, a child born with ptosis may also have eye-movement abnormalities, muscular diseases, lid tumors, or other tumors, neurological disorders or <u>refractive errors</u>.



Ptosis in an adult

### **Ptosis Treatment**

An eye doctor will diagnose ptosis by carefully examining the eyelids. He or she will take detailed measurements of the height of the eyelids and will assess the strength of the eyelid muscles.

Surgery can be an effective treatment for ptosis in both children and adult, improving vision as well as cosmetic appearance. It is very important that children with ptosis have <u>regular ophthalmic examinations early in life</u> to monitor their vision and prevent severe vision loss from untreated amblyopia.

#### Congenital ptosis treatment

In most cases, the treatment for childhood ptosis is surgery. If <u>amblyopia</u> is present, <u>treatment with patching, eyeglasses</u>, <u>or eyedrops</u> may be necessary. In determining whether or not surgery is necessary and which procedure is the most appropriate, an ophthalmologist (Eye M.D.) will consider a few important factors:

- The child's age;
- Whether one or both eyelids are involved;
- The eyelid height;
- The eyelid's lifting and closing muscle strength;
- The eye's movements.

During ptosis surgery, eyelid-lifting muscle (levator) is tightened. In severe ptosis, when the levator muscle is extremely weak, the lid can be attached or suspended from under the eyebrow so that the forehead muscles can do the lifting.

Mild or moderate ptosis usually does not require surgery early in life. Children with ptosis, whether they have had surgery or not, should be examined regularly by an ophthalmologist for amblyopia, refractive disorders and associated conditions. Even after surgery, focusing problems can develop as the eyes grow and change shape.

### Adult ptosis treatment

Your ophthalmologist will determine the cause of the ptosis and plan the best treatment. If treatment is necessary, it is usually surgical. Sometimes a small tuck in the lifting muscle and removal of excess eyelid skin (called blepharoplasty) can raise the lid sufficiently. More severe ptosis requires reattachment and strengthening of the levator muscle.

### What are the risks of ptosis surgery?

The risks of ptosis surgery include infection, bleeding, and reduced vision, but these complications are not common. Immediately after surgery, you may find it difficult to completely close your eye, but this is only temporary. Lubricating eyedrops and ointment can be helpful during this period.

Although improvement of the lid height is usually achieved, the eyelids may not appear perfectly symmetrical. In rare cases, full eyelid movement does not return. In some cases, more than one operation may be required.

#### Additional ptosis information resources

American Academy of Ophthalmology Preferred Practice Pattern: Pediatric Eye Evaluations (September 2005)

American Academy of Ophthalmology Preferred Practice Pattern: Comprehensive Adult Medical Eye Evaluation (September 2005)