

CONGENITAL LACRIMAL OBSTRUCTION – TEARING IN CHILDREN



What is congenital lacrimal obstruction?

The *lacrimal* (tear) glands produce tears constantly during the day to keep the eyes lubricated. The tears drain away from the eyes through the lacrimal drainage system. Approximately 7% of infants are born with congenital obstruction of the

tear drainage system in one or both eyes. This percentage is even higher in premature infants.

What is the anatomy?

The tear drain consists of two small openings called *punctum*; one in the upper eyelid and the other in the lower eyelid. Each of these openings leads into a small tube called the *canaliculus* which, in turn, empties into the *lacrimal sac* between the inside corner of the eye and nose. The lacrimal sac leads into a canal called the *nasolacrimal duct* that passes through the bony structures surrounding your nose and empties tears into the nasal cavity.

How does the tear drain work?

With each blink, the eyelids push tears evenly across the eyes to keep them moist and healthy. Blinking also pumps old tears into the puncta and lacrimal sac where they travel through the tear duct and drain into the nose. If the tear duct is blocked, tears back up and spill over the eyelids and run down the cheek. Tears trapped in the tear sac can become stagnant and infected.

What are the symptoms of having a blocked tear duct?

The most common symptoms are excessive watering, mucous discharge, eye irritation, and painful swelling in the

inner corner of the eyelids. A skillful history and physical examination can usually pinpoint the cause of tearing.

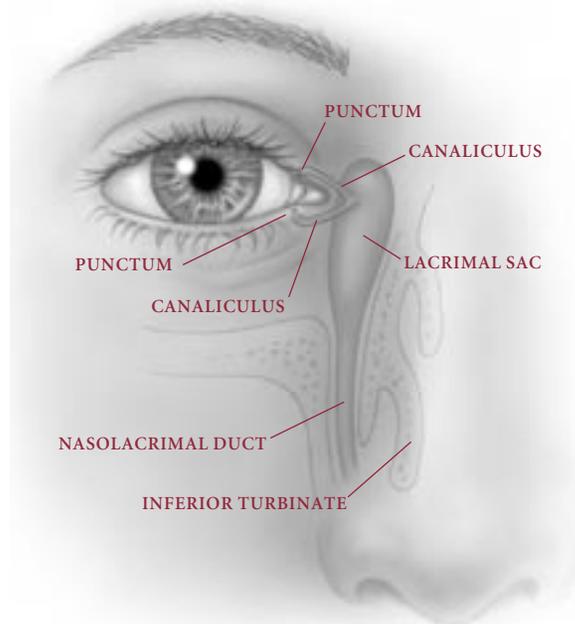
Is congenital lacrimal obstruction serious?

It is important that children with excessive tearing be examined by an ophthalmologist to determine the cause of the problem. In some children, excessive tearing may be due to causes other than tear duct obstruction.

What are the treatments?

Initial treatment involves massaging the area around the affected lacrimal sac to force the tears down the nasolacrimal duct, and to push open the membrane causing the obstruction. The physician may also prescribe antibiotic drops or ointment.

If massage doesn't relieve the obstruction, probing may be necessary. Lacrimal probing is usually performed as an outpatient procedure, typically under general anesthesia.



A fine metal probe is inserted through the punctum and passed down the duct through the obstruction. If the inferior turbinate is blocking the end of the nasolacrimal duct, it can be moved. In severe or recurrent cases, a soft rubber stent may be placed in the tear duct and left in place for several weeks. This stent can usually be removed in the office. Antibiotic ointment or drops may be prescribed after probing.

What are the risks and complications?

Minor bruising or swelling may be expected and will likely go away in one to two weeks. Occasionally, the body may form scar tissue that blocks the drain again which may require repeating the procedure. Bleeding and infection, which are potential risks with any surgery, are very uncommon. As with any medical procedure, there may be other inherent risks that should be discussed with your surgeon.

Is the surgery effective?

Most patients experience resolution of their tearing and discharge after probing is completed, with little if any postoperative discomfort.

Who performs the surgery?

Patients are most commonly treated by ophthalmic plastic and reconstructive surgeons who specialize in diseases and problems of the eyelids, tear drain, and orbit (the area around the eye).

You should look for a doctor who has completed an American Society of Ophthalmic Plastic and Reconstructive Surgery (ASOPRS) fellowship. This indicates your surgeon is not only a board certified ophthalmologist, but also has had extensive training in ophthalmic plastic surgery. When you are ready, you will be in experienced hands. Your surgery will be in the surgeon's office, an outpatient facility, or at a hospital depending on your surgical needs.

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