MPPMG
Monterey Peninsula Pediatric Medical Group

Blocked Tear Duct

Also called: Dacrostenosis or Nasolacrimal duct obstruction

Introduction:
Our eyes are constantly making a protective film of tears to bathe the eyeball. Simple in appearance, tears have a marvelously complex structure. The tear film is composed of three layers. The thin outer layer, produced by the inside of the eyelids, is an oily film. The largest part of the tear structure is a middle layer of salty water, produced in the lacrimal gland. The innermost layer, produced by the conjunctiva on the front of the eye, is composed mostly of mucus. This wonderfully designed film is ideal to protect, cleanse, and lubricate the eye.

Tears normally drain though a pinpoint opening at the inside corner of the eye. They then flow through the nasolacrimal duct into the nose.

What is it?
In many babies, the nasolacrimal duct is not fully developed at the time of birth. Signs of this usually appear in the first weeks of life. The duct may be plugged by a membrane left from birth, or by swelling or mucus. This is called nasolacrimal duct obstruction (NLDO) or a blocked tear duct. A child who has an unusually narrow duct has dacrostenosis. Thus a blocked tear duct is the blockage of the exit, not a blockage of the entrance duct from the lacrimal gland where the tears are produced. Blocked tear ducts are very common in newborns. Up to 70% of all newborns are believed to have blocked tear ducts. They cause noticeable symptoms in 6% to 20% of these babies.

Who gets it?
This condition occurs in infants and is quite common.

What are the symptoms?
This can be thought of as three stages or phases. The first is just excess tears causing wetness or pooling as they accumulate. The second stage is when a soft mucoid discharge appears as a result of minor inflamation caused by dust, old epithelial cells, and other debris that are usually swept away by the stream of tears from the lacrimal gland to the tear duct. The third stage develops when germs find this small amount of mucus, which to them is nutritious food. That is when infection set in.

Is it contagious?
No

How long does it last?
Blocked tear ducts usually disappear on their own by the time a child is a year old.

How is it diagnosed?
The diagnosis is based on the history and physical exam.

How is it treated?
The primary treatment is gentle cleansing of the lids with a warm wet washcloth. Use a clean portion of the washcloth with each pass. You can also use something disposable such as a cotton ball or Kleenex wet with warm water. Sometimes antibiotic eye drops are needed if an infection is beginning. Occasionally symptoms persist beyond one year of age. If they do, probing of the duct by a pediatric ophthalmologist is indicated.

Alan H Rosen
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