



**Probing of the Tear Ducts  
With and Without Placement of Silicone Tubes  
Informed Consent Counseling Statement**

**Introduction:** Perhaps 5 to 10% of children are born with a blocked tear duct on one or both sides. A membrane covering the end of the tear duct where it drains into the back of the nose almost always causes this. Even without any treatment, the condition will resolve spontaneously fully in 80% or more of children. The rate of improvement can be improved significantly with appropriate massage of the tear sac. However, most children who will improve without surgical treatment do so by six months of age, and the incidence of spontaneous resolution is unusual after 1 year of age. Also, probing of the tear duct system alone is less likely to be successful if performed after two years of age. Consequently, we normally schedule tear duct probing in children after six months of age, and after at least a one or two month trial of tear duct massage. This simple probing is sometimes performed by physicians in the office with the child restrained on a "papoose" board. However, we personally feel that the procedure is uncomfortable enough to warrant a brief general anesthetic as an outpatient same-day surgery procedure. If only a simple probing is required, this often can be accomplished with only an anesthetic mask. If silicone tube placement is required, the children require an endotracheal tube (breathing tube in the windpipe).

**Need:** Blocked tear duct on one or both sides.

**Alternatives:** No surgery. Most blocked tear ducts will spontaneously open up by six months of age. Massage of the tear sac will improve the rate of resolution without surgery. However, some small infants must be probed less than six months of age if the blockage results in more serious infections of the eye or the tissues around the eye.

**Risk:** 1/18,000 for general anesthesia.

**Complications:**

- 1) Nosebleed
- 2) Excessive widening of the punctum or canaliculus, the tear drainage pipes in the lids.
- 3) Infection around the eye (treated with antibiotics)

**No Surgery:** No treatment in early childhood is generally required. If the tear duct system is not open by the age 1-2 years, it is highly unlikely that it will cure itself without surgical treatment. If the tear duct drainage system is not made patent by simple probing, with or without silicone tubes, then the only choice is a more involved major procedure called a CDR (dacryocystorhinostomy) at a later date. During a DCR, the eye surgeon creates an opening between the tear sac and the inside of the nose.

Without treatment, children with blocked tear ducts have recurrent overflow of tears from their eyes, and often recurrent episodes of eye infections, conjunctivitis, with crusty eyes with mucous.

**Benefits:**

- 1) Resolution of the tears running down the child's cheek by restoring the normal flow of tears through the tear ducts into the nose,
- 2) resolution of the recurrent pus drainage from the eyes caused by the stagnant tears becoming infected from not draining through the nose
- 3) Opening the tear drainage system by simple probing with or without silicone tubes will prevent the need for more serious surgery later as an adolescent or an adult.

**Indications: Blocked tear duct(s)**

**Additional Surgery:**

- 1) If probing is performed between the ages of 6 and 18 months or so, the procedure is generally successful 90% or more of the time.
- 2) If the first probing is unsuccessful, then there are several options to consider:
  - a. A second probing (We do not do this, since we do not feel that a second probing is likely to be 90% successful if the first probing was not successful.)
  - b. A second probing with infracture of the turbinate bone inside the nose, if it feels like this bone is obstructing the outflow drainage of the nasolacrimal duct.
  - c. A second probing with placement of a silicone tube to hold the tear ducts open. The same risks pertain to these procedures as listed above for the probing with the additional possible complications of a second general anesthetic, and increased probability of nosebleed.
- 3) If a silicone tube is placed; it needs to remain in place a minimum of 6 weeks, and preferably up to six months or more. The tube can generally be removed in the clinic, but can sometimes require a general anesthetic in the operating room.

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