Tear Duct Obstruction
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Tear duct obstruction is a common condition, occurring in about 6 of every 100 newborns. Fortunately, this condition usually resolves with conservative treatment, without the need for surgery.

Tears normally drain from the corner of the eyes, through small openings in the eyelids into the tear duct and down to the back of the nose. That is why your nose runs when you cry. When a blockage of the tear duct is present, the tears run down the cheek instead of into the nose. Constant tearing of the eyes and matting of the eyelashes results. In addition, tear duct obstruction promotes bacterial growth and recurrent eye infections.

The first line treatment of tear duct obstruction is massage and antibiotic eye drops. Massage clears the mucous from the tear duct and promotes opening of the blockage. It is important to massage properly. This process is better described as pressure treatment than true massage. Firm pressure should be applied to the tear duct sac, which is located in the crevice between the eye and the nose. Do not be afraid to push down firmly. If mucous is expressed when you press down, then you are doing it right. Antibiotic eye drops may also be prescribed. These drops should only be used when mucoid discharge is present.

For children that do not improve by one year of age, tear duct probing surgery is usually indicated. One year of age is the optimum time for surgery, allowing adequate time for spontaneous improvement and maximizing the success rate of the procedure. Tear duct probing is a simple surgery. After the child is asleep with general anesthesia, a fine metal probe is gently passed through the existing pathway of the tear duct to clear any obstruction in the passage. Once the pathway is open, the duct is irrigated with water to insure that the pathway is completely clear. The surgery generally takes less than ten minutes to complete and is done on an outpatient basis.

The success rate of tear duct probing surgery is approximately 90%. The success rate is lower for children more than 18 months of age. If tearing has not cleared two weeks after the probing, additional surgery may be needed. During the second surgery, a special tear duct probe called a Lacricath is used to further stretch open the blocked tear duct. The Lacricath is a tear duct probe with an inflatable balloon at its end, similar to the balloon catheter used to open blocked heart vessels during angioplasty. During the probing, the balloon is inflated which stretches open the tear duct blockage. In some children, a small nasal bone called the inferior turbinate can block the drainage of tears. During the second surgery, this bone is moved to the side by a procedure known as an infracture in an effort to make a clear passage for tears to flow into the nose.

Tearing persists in less than 20% of children after the second surgery. If this does occur, a third surgery may be needed in which a silicone tube is placed into the tear duct system. This tube is nearly invisible and is left in place for three to six months while the duct heals. As healing occurs, the tissue tightens around the tube but does not completely close the passage. The tube is removed in the office thereby leaving a clear pathway as nature intended.