Frequently asked questions about Nasolacrimal Duct Obstruction

1. What is a nasolacrimal duct obstruction? Nasolacrimal duct obstruction is incomplete development of the nasolacrimal duct leading from the tear drainage sites known as puncta in the eyelids to the internal nose. The tears travel through the incomplete duct until they can travel no further and then back up into the eyes causing wet eyelashes and tearing.

2. There is a lot of goopy yellow discharge, isn't there an infection? The discharge from the stagnant tears is filled with mucous which is produced by the nasolacrimal duct when irritated by an occasional bacteria. If the amount of mucous and discharge is significantly increased, this may represent the onset of an infection and may require an antibiotic. Antibiotics applied to the eye will often eliminate much of the bacterial contamination of the tears and cause the mucous production to be diminished making the thin tears able to pass through a small nasolacrimal duct opening. This may cause the problem to appear resolved however, the underlying problem of the obstruction to the plumbing of the tear system remains and the problem will occur upon cessation of the antibiotic. Continued and repetitive antibiotic application is expensive, unnecessary and may cause bacteria to become resistant to the antibiotics and this should be avoided.

3. What can I do about my child's nasolacrimal duct obstruction? For a child under one year of age, we recommend direct compression of the affected nasolacrimal sac 5 times with each diaper change. Compression should be done to cause blanching of the fingertip without leaving prolonged pinkness to the skin. An infant is usually fussy when this is done but application of this pressure to your own nasolacrimal sac can demonstrate that the child feels only pressure and not pain with compression. No finger movements across the skin are necessary to complete this nasolacrimal duct compression massage.

4. What happens if massage does not work for resolution of my child's tearing problem? Nasolacrimal duct massage is an excellent approach to this common difficulty in infants with a 90% success rate in children under one year of age. In some cases, massage is not effective and frequent infections occur requiring multiple antibiotic use or the child is beyond one year of age and has not had resolution with massage to date. In such cases, nasolacrimal duct surgery is performed with excellent success. Nasolacrimal duct probing can be done to open the nasolacrimal duct tube into the nose by applying a soft, thin, wire probe to push through any obstruction. This is done while the child is asleep under general anesthesia, causing no discomfort and is typically completed in minutes. The success rate of the nasolacrimal duct probing is approximately 70%. If nasolacrimal duct probing is not effective in opening the nasolacrimal duct sufficiently, this procedure can be combined with nasolacrimal duct intubation whereby a silicone tube is placed within the nasolacrimal duct system to keep it open while it heals. This silicone tube is retained in the tear system, with very little tube visibility externally, until the tearing has resolved at anywhere from 2 to 6 months following insertion. The tube can then be removed in the office without difficulty and the tearing resolves completely in 98% of cases following this procedure.

5. What are the risks for nasolacrimal duct obstruction surgery? The greatest risk of this surgery is that is requires general anesthetic for the greatest safety and comfort of the child. The risks of general anesthetic in children are low but present. The risk of any serious complication including death from anesthesia is approximately 1 in 30,000. This is a high number if it affects your child however it is a low number in terms of the risks we face everyday such as car accidents which occur at about 1 in 1,000. It is best not to perform surgery until medical treatment, such as massage, has been shown to be ineffective.

6. What happens if I decide not to have nasolacrimal duct surgery for my child's tearing problem? Simple nasolacrimal duct surgery requiring no skin incision can be performed commonly and easily. As the child becomes older than 18 to 24 months, the obstruction generally becomes firmer and more ossified or bone-like. When firm obstructions are present, they can not be treated in such a simple fashion and must be bypassed with a procedure known as a dacryocystorhinostomy whereby a new tear duct is formed from the eyelid to the nose. This often requires a skin incision and is a greater amount of surgery for something that could have been cared for sooner.

For further questions or information regarding the care of nasolacrimal duct obstructions and tearing in children, please contact us at OcuSight Eye Care.