Lacrimal Disorders

Last updated: May 9, 2019

[Dacryostenosis 1](#_Toc2989564)

[Clinical Features 1](#_Toc2989565)

[Treatment 1](#_Toc2989566)

[Dacryocystitis 1](#_Toc2989567)

[Dacryoadenitis 2](#_Toc2989568)

Tear film provides:

1. smooth and transparent **refractive surface**
2. essential **moisture**
3. **oxygen** to epithelial cells
4. **protective proteins** (e.g. IgA, complement, lysozyme)

Health of ocular surface is entirely dependent upon *quantity & quality of tear film* (both can be altered by contact lenses!).

* normal eye has 6 μL tears with turnover 1.2 μL/min.

Dacryostenosis

*- stricture of nasolacrimal duct.*

**Congenital dacryostenosis** - epiphora of one eye in infant (at age > 3 wk)

**Acquired dacryostenosis**:

1. chronic lacrimal sac infection
2. severe or chronic conjunctivitis.
3. deviated septum, hypertrophic rhinitis, mucosal polyps, hypertrophied inferior turbinate, fracture of facial bones.

Clinical Features

* prolonged blockage → dacryocystitis.
* pressure on lacrimal sac → copious mucus / pus reflux from punctum.

Treatment

**Congenital dacryostenosis** - **resolves spontaneously** by age 6 mo.

* ***milking lacrimal sac*** (with firm fingertip massage) + ***antibiotic ointment*** may speed resolution.
* if resolution is not spontaneous → ***punctum should be dilated*** (under brief general anesthesia) and ***lacrimal drainage system probed***.

**Acquired dacryostenosis** - dilate punctum under local anesthetic → **isotonic saline irrigation** through nasolacrimal system with fine blunt canaliculus needle (fluorescein drop in saline makes obstruction in nose easily detectable).

* if this technique fails → **lacrimal probing** with increasing size.
* complete obstruction → **surgical opening**.

Dacryocystitis

*- infection of lacrimal sac.*

* usually *secondary to dacryostenosis*.

**Acute dacryocystitis** - pain, redness, edema about lacrimal sac; epiphora; conjunctivitis; blepharitis; fever; leukocytosis; abscess may form → rupture → draining fistula.

* treatment - frequent **hot compresses**; cephalexin / cefazolin for *severe cases*; incision and drainage for *abscess*.

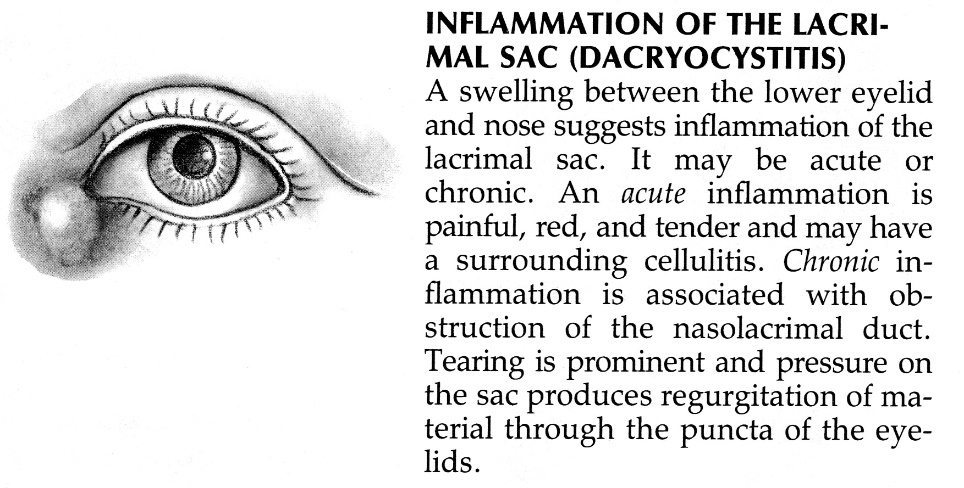


[Source of picture: “Online Journal of Ophthalmology” >>](http://www.atlasophthalmology.com/atlas/frontpage.jsf?locale=en)

**Chronic dacryocystitis** - slight sac swelling and tearing may be the only symptoms.

* pus may regurgitate (through punctum) when pressure is applied.
* retained secretions may form large mucocele.
* treatment - **nasolacrimal duct dilation** with probe and **syringing with saline**(under local anesthetic); contributory nasal or sinus abnormalities should be treated.

if this treatment fails → nasolacrimal intubation, dacryocystorhinostomy, sac removal.

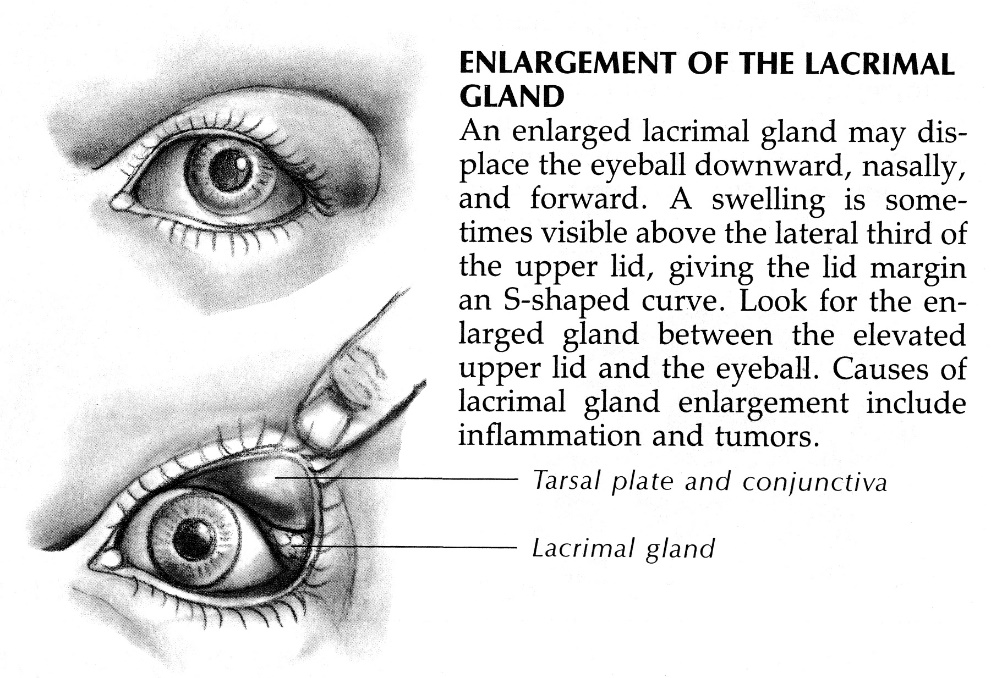


Dacryoadenitis

* pain and swelling on temporal side of upper lid (upper lid appears S-shaped), ptosis:
* etiology:

**acute** – viruses (mumps, influenza, measles), gonococci.

**chronic** – tumors, sarcoid, tbc.





[Source of picture: “Online Journal of Ophthalmology” >>](http://www.atlasophthalmology.com/atlas/frontpage.jsf?locale=en)

Bibliography for ch. “Ophthalmology” → follow this [link >>](http://www.neurosurgeryresident.net/Eye.%20Ophthalmology\Eye.%20Bibliography.pdf)

[Viktor’s Notes℠ for the Neurosurgery Resident](http://www.neurosurgeryresident.net/)

[Please visit website at www.NeurosurgeryResident.net](http://www.neurosurgeryresident.net)