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# OCULAR DISEASE

## Enophthalmos



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# Introduction

- Inflammation of the lacrimal sac is not an uncommon condition. It may occur in two forms:
  - A) Congenital Dacryocystitis
  - B) Adult Dacryocystitis



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# CONGENITAL DACRYOCYSTITIS

- It is an inflammation of the lacrimal sac occurring in newborn infants; and thus also known as ***dacryocystitis neonatorum.***



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# Etiology

- It follows **stasis of secretions** in the lacrimal sac due to ***congenital blockage in the nasolacrimal duct.***
- *It* is of very common occurrence.
- As many as 30 percent of newborn infants are believed to have closure of nasolacrimal duct at birth;
- Mostly due to 'membranous occlusion' at its lower end, near the valve of Hasner.



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# Other causes of congenital NLD block

- ✓ Presence of **epithelial debris**
- ✓ **Membranous occlusion** at its upper end near lacrimal sac,
- ✓ Complete **noncanalisation**
- ✓ Rarely **bony occlusion**
- *Common bacteria associated with congenital dacryocystitis are*  
**staphylococci, pneumococci** and **streptococci**



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# Clinical picture

- Congenital dacryocystitis usually presents as a mild grade chronic inflammation.
  1. ***Epiphora***, usually developing after **seven days of birth**. It is followed by **copious mucopurulent** discharge from the eyes.



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- 2. Regurgitation test is usually positive, i.e., when pressure is applied over the lacrimal sac area, purulent discharge regurgitates from the lower punctum.**
- 3. Swelling on the sac area may appear eventually.**



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# Differential diagnosis

- Congenital dacryocystitis needs to be differentiated from other causes of watering in early childhood especially
  - ✓ ***Ophthalmia neonatorum***
  - ✓ ***Congenital glaucoma.***





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# Complications

- When not treated in time it may be complicated by
  - ✓ Recurrent conjunctivitis,
  - ✓ Acute or chronic dacryocystitis,
  - ✓ Lacrimal abscess
  - ✓ Fistulae formation.



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# Treatment

1. **Massage over the lacrimal sac area** and **topical antibiotics** constitute the treatment of congenital NLD block, **up to 6-8 weeks** of age.
  - Massage increases the **hydrostatic pressure in the sac** and helps to open up the membranous occlusions.
  - It should be carried out at least **4 times a day** to be followed by instillation of antibiotic drops.



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## 2. Lacrimal syringing (irrigation) with normal saline and antibiotic solution.

- It should be added to the conservative treatment if the condition is **not cured up to the age of 2 months.**
- Lacrimal irrigation helps to **open the membranous occlusion** by exerting **hydraulic pressure.**
- Syringing may be carried out once or twice a week.



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## **3. Probing of NLD with Bowman's probe:**

- It should be performed, in case the condition is not cured by the age of 3-4 months.
- It is usually performed under general anaesthesia



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- 4. Intubations with silicone tube** may be performed if repeated **probing are failure**. The silicone tube should be kept in the NLD for about six months.
- 5. Dacryocystorhinostomy (DCR) operations:** When the child is brought **very late or repeated probing** is a **failure**, then conservative treatment by massaging, topical antibiotics and intermittent lacrimal syringing should be continued till the age of **4 years**. After this, DCR operation should be performed.