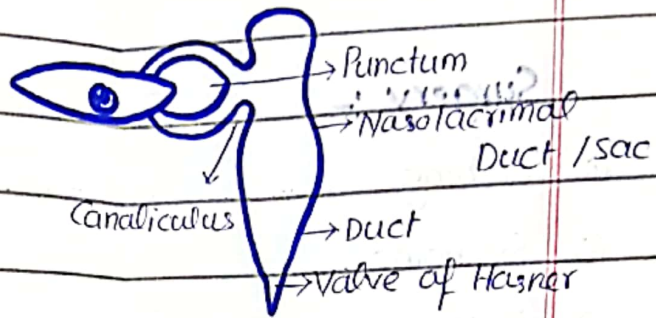


# Lacrimal - System



## Q.No.01 "Congenital Nasolacrimal Duct Obstruction"

### Aetiology:-

- ①- Lower end of Nasolacrimal duct non-canalized
- ↓
- ②- cause epiphora
- ③- Maldevelopment of punctum + canaliculi

### Clinical Features:-

- ①- Watery Eye
- ②- Sticky mucoid discharge accumulate on medial side of eye
- ③- Regurgitation Test +ve.

### D/ Diagnosis :-

### Complication

- |                        |                      |
|------------------------|----------------------|
| ①- Conjunctivitis      | ↓<br>Mucocoele       |
| ②- Congenital glaucoma | Conjunctivitis       |
| ③- Keratitis           | Acute Dacryocystitis |
| ④- Uveitis             | Chronic "            |
|                        | Fistula.             |

Rx →

Surgery :-

- ① Probing
- ② Syringing
- ③ Balloon catheter dilation of NL duct
- ④ Intubation
- ⑤ DCR → Dacryocystorhinostomy

Conservative :-

Massage of Lacrimal sac

Antibiotics



① - Topical

② - Systemic

## "Amniotocoe"

① - Bluish grey cystic swelling of lacrimal sac due to collection of amniotic fluid

② - NL-Duct block at the level of Hasner.

Rx :-

Massage of lacrimal sac

Topical antibiotics

Probing

Q: 04 month baby with <sup>\*</sup>epiphora of Rt. eye

\* Since birth?

Diagnosis - Congenital Nasolacrimal

D/Diagnosis - Duct obstruction.

Rx

# Acute - Dacryocystitis

Define :-

Acute inflammation of lacrimal sac

Aetiology :-

- ① - Staphylococcus aureus
- ② - Pneumococcus
- ③ - Streptococcus

Clinical Features :-

- ① Painful
- ② Redness
- ③ Swelling
- ④ Tenderness → Regurgitation Test Difficulty
- ⑤ Abscess formation → Rupture  
Pus → release

Rx:

Conservative :-

① Antibiotics → Topical :-

systemic

- ② Analgesics
- ③ Anti-inflammatory Drug
- ④ Hot - Fomentation

Surgical :-

- ① Incision and Drainage
- ② Probing → Not performed in acute
- ③ DCR (Dacryocystorhinostomy)

## "Chronic Dacryocystitis"

### Aetiology:-

Impaired → Outflow of These sac lead to  
Tears leads to 2ndry infection  
stasis of ~~tears~~ by low virulence organisms

### Clinical Features:-

- ①- Constant watering of eye
- ②- Bilateral
- ③- Regurgitation Test +ve & reflex of watering
- ④- Mucopurulent discharge from puncti
- ⑤- Mucocele formation
- ⑥- Related To chronic unilateral conjunctivitis

### Rx:-

(Dacryocystorhinostomy) DCR → External: Incision + Drainage.

(Dacryocystorhinostomy) DCR → Endo laser.

## "Dry-Eyes-Syndrome"

### -: Keratoconjunctivitis sicca:-

Disorder of pre-corneal tear film → ↓ Tear formation  
↑ Evaporation.

### Aetiology:-

- ①- Aqueous Tear Deficiency → Pure Keratoconjunctivitis sicca
  - Primary Sjogren's Syndrome
  - Secondary Sjogren Syndrome
  - Non-Sjogren Syndrome.
- ②- Evaporation Tear dysfunction
- ③- Trachoma
- ④- Steven Johnson syndrome.

## Clinical Features :-

### Symptoms

- ↓
- Dryness
- G - Irritation
- B - Burning
- F - Foreign body sensation
- P - Photophobia
- s - String Mucous Discharge
- T - Transient Blurring of vision
- P - Pain worse on blinking
- B - Red-eye

### Signs

- ↓
- ① - ↓ Tear in Tear strip
- ② - Presence of mucoid strands
- ③ - Punctate epithelial erosion
- ④ - Corneal filament stained with rose-bengal.

### Diagnosis :-

Clinical sign → ↓ Marginal Tear strips ✓ Punctate epithelial  
↑ Mucous strands ✓ erosion.  
Corneal filaments stained with BOR  
"Rose bengal"

### Special Test →

① :-> Tearfilm break up time (15-20s) Normal ✓

In Dry Eyes 10s

② :-> Epithelial staining ✓

① - Fluorescence

corneal film.

① - Rose-bengal stain

② - Lissamine green.

✓  
③ Schirmer Test :->

Watermann filter paper <sup>at</sup> place of cor.

Wet in 5 min < 6 min

④ Cytology :->

↓ Goblet cells.

R<sub>x</sub>:

Conservative :->

① Artificial Tear

② Autologous Serum

③ Mucolytic agent (VAM)

↳ Acetylcystein drop.

④ Topical retinoids

⑤ Topical steroids

⑥ Topical cyclosporin

⑦ Soft Contact lenses

Surgery :->

① Punctal plug

② Transplantation of lacrimal  
ducts in conjunctiva



②

# "Epi-phora"

R

## Definition:-

Watery eye due to ↓ Drainage of tears, also weak orbicularis muscle.

## Cause:-

### Obstructive epiphora:-

- ① Punctate stenosis
- ② Canalicular atresia
- ③ - Chronic sinus disease
- ④ - Nasal polyp
- ⑤ - Trauma
- ⑥ Infection - Dacryocystitis

### Lacrimal pump failure:-

- ① - Lower Lid Laxity
- ② - Fascial palsy
- ③ - Lower lid ectropion.

## Diagnosis:

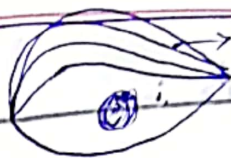
### Clinical Examination:-

- ① - Eyelid-position
- ② - Muscle function
- ③ - Regurgitation Test
- ④ - Nasal examine Test

### Others:-

- Jones Dye Test
- Dacryocystography
- Lacrimal scintillography
- Sac syringing.





Rx :-

Pump failure :-> Restoring position of punctum

Obstruction :-> also Rx with surgery

### -: Dacryocystitis :-

- Lacrimal gland inflammation -

Acute - D

Chronic - D

### -: Aetiology :-

- ①. Viral infections
  - ①. TB, syphilis
- ②. EBV, CMV, Mumps
  - ②. Foreign body Trauma
- ③. Infectious Mono-nuclease
  - ③. Granuloma
- ④. Bacterial -> Staphylococcus
  - Actinimic - Sjogren syndrome
- Streptococcus
  - Unknown - Sarcoidosis
- ⑤. Fungi -> Histoplasma
  - Amyloidosis
- Blastomyces

### -: Clinical Features :-

- Pain
- Painless
- Discomfort -> Upper orbit position
- Eye-ball down displacement
- Eyelid - swell
- S-shaped curved margin
- S-shaped curved Margin
- Painful proptosis
- Diplopia
- Eversion of eyelid
- Eversion of eyelid
- Pre-auricular enlarge
- Nodes

16

## D/Diagnosis :-

- ① Eyelid-Abcess
- ② Hordeolum internum
- ③ Hordeolum externum
- ④: Purulent conjunctivitis

## Rx :-

- ① Hot-Compression
- ② Analgesics
- ③ Broad-spectrum antibiotics
- ④ Incision & Drainage

## Complication:

- ① Mucocele
- ② - Conjunctivitis
- ③ Acute Dacryocystitis
- ④ - Chronic Dacryocystitis
- ⑤. Fistula-Formation
- ⑥. Pre-septal cellulitis.