

www.FirstRanker.com

# DEGENERATIVE CONDITIONS OF CONJUCTIVA

www.FirstRanker.com



## PINGUECULA

ker.com

- Pinguecula is an extremely common degenerative condition of the conjunctiva
- It is characterized by formation of a yellowish white patch on the bulbar conjunctiva near the limbus



www.FirstRanker.com



## ETIOLOGY

- Etiology of pinguecula is not known exactly
- It has been considered as an age-change, occurring more commonly in persons exposed to strong sunlight, dust and wind



www.FirstRanker.com

## PATHOGENESIS

• There is an elastotic degeneration of collagen fibres of the substantia propria of conjunctiva, coupled with deposition of amorphous hyaline material in the substance of conjunctiva



www.FirstRanker.com

## **Clinical features**

- Pinguecula is a bilateral, usually stationary condition, presenting as yellowish white triangular patch near the limbus
- Apex of the triangle is away from the cornea
- It affects the nasal side first and then the temporal side
- When conjunctiva is congested, it stands out as an avascular prominence



## Complications

- Inflammation
- Intraepithelial abscess formation
- Calcification
- doubtful conversion into pterygium



## Treatment

- In routine no treatment is required for pinguecula
- However, when cosmetically unaccepted and if so desired, it may be excised
- When inflamed it is treated with topical steroid



## PTERYGIUM

 Pterygium is a wing-shaped fold of conjunctiva encroaching upon the cornea from either side within the interpalpebral fissure



## Etiology

- Etiology of pterygium is not definitely known
- But the disease is more common in people living in hot climates
- it is a response to prolonged effect of environmental factors such as exposure to sun (ultraviolet rays), dry heat, high wind and abundance of dust.



## Pathology

er.com

- Pathologically pterygium is a degenerative and hyperplastic condition of conjunctiva
- The subconjunctival tissue undergoes elastotic degeneration and proliferates as vascularised granulation tissue under the epithelium, which ultimately encroaches the cornea
- The corneal epithelium, Bowman's layer and superficial stroma are destroyed



# **Clinical features**

#### Demography

- Age: Usually seen in old age
- Sex: More common in males doing outdoor work than females
- Laterality: It may be unilateral or bilateral. Usually present on the nasal side but may also occur on the temporal side



## Symptoms

- Cosmetic intolerance may be the only issue in otherwise asymptomatic condition in early stages
- Foreign body sensation and irritation may be experienced
- Defective vision occurs when it encroaches the pupillary area or due to corneal astigmatism induced by fibrosis in the regressive stage
- Diplopia may occur occasionally due to limitation of ocular movements.



## Signs

- Pterygium presents as a triangular fold of conjunctiva encroaching on the cornea in the area of palpebral aperture usually on the nasal side
- But may also occur on the temporal side
- Very rarely, both nasal and temporal sides are involved



### Parts

Head: Apical part present on the cornea

er.com

- Neck: Constricted part present in the limbal area, and
- Body: Scleral part, extending between limbus and the canthus
- Cap: Semilunar whitish infiltrate present just in front of the head



## Types

er.com

- Progressive pterygium is thick, fleshy and vascular with a few whitish infiltrates in the cornea, in front of the head of the pterygium known as Fuch's spots or islets of Vogt also called cap of pterygium
- Regressive pterygium is thin, atrophic, attenuated with very little vascularity. There is no cap, but deposition of iron (Stocker's line) may be seen sometimes, just anterior to the head of pterygium



## Complications

- Cystic degeneration and infection are infrequent
- Neoplastic change to epithelioma, fibrosarcoma or malignant melanoma, may occur rarely



## Treatment

- Surgical excision is the only satisfactory treatment, which may be indicated for
- Cosmetic disfigurement.
- Visual impairment due to significant regular or irregular astigmatism
- Continued progression threatening to encroach onto the pupillary area (once the pterygium has encroached pupillary area, wait till it crosses on the other side).
- Diplopia due to interference in ocular movements.

- Recurrence of the pterygium after surgical excision is the main problem (30–50%).
- it can be reduced by,

er.com

- Surgical excision with free conjunctival limbal autograft (CLAU) taken from the same eye or other eye is presently the preferred technique
- Surgical excision with amniotic membrane graft and mitomycin-C (MMC) (0.02%) application may be required in recurrent pterygium or when dealing with a very large pterygium.
- Surgical excision with lamellar keratectomy and lamellar keratoplasty may be required in deeply infiltrating recurrent recalcitrant pterygia

#### Firstranker's choice Surgical technique of pterygium

#### excision

- After topical anaesthesia, eye is cleansed, draped and exposed using universal eye speculum
- Head of the pterygium is lifted and dissected off the cornea very meticulously
- Main mass of pterygium is then separated from the sclera underneath and the conjunctiva superficially.
- Pterygium tissue is then excised taking care not to damage the underlying medial rectus muscle
- Haemostasis is achieved and the episcleral tissue exposed is cauterised thoroughly
- Conjunctival limbal autograft (CLAU) transplantation to cover the defect after prefygiumexcision



www.FirstRanker.com

## CONCRETIONS

## Etiology

- Concretions are formed due to accumulation of inspissated mucus and dead epithelial cell debris into the conjunctival depressions called loops of Henle
- They are commonly seen in elderly people in a degenerative condition and also in patients with scarring stage of trachoma



www.FirstRanker.com

## **Clinical features**

- Concretions are seen on palpebral conjunctiva, more commonly on upper than the lower.
- They may also be seen in lower fornix
- These are yellowish white, hard looking, raised areas, varying in size from pin point to pin head
- It produce foreign body sensations and lacrimation by rubbing the corneal surface



#### Treatment

• It consists of their removal with the help of a hypodermic needle under topical anaesthesia



## AMYLOID DEGENERATION OF CONJUNCTIVA Etiology

- two forms
- Primary conjunctival amyloid is associated with deposition of light-chain immunoglobulin by the monoclonal B cells and plasma cells
- Secondary conjunctival amyloid may occur secondary to systemic diseases or secondary to chronic conjunctival inflammations.



www.FirstRanker.com

## **Clinical features**

- Deposition of yellowish, well-demarcated, irregular amyloid material in the conjunctiva with superior fornix and tarsal conjunctiva being more commonly involved areas.
- Subconjunctival haemorrhage may be associated with amyloid deposition in blood vessels.



### Treatment

- Lubricating drops for mild symptoms
- Excision biopsy can be performed in patients with marked irritation due to raised lesions



www.FirstRanker.com

# THANK YOU

www.FirstRanker.com