

Pterygium

Definition

Degenerative fibrovascular growth of conjunctiva onto the cornea, usually triangular in shape in the interpalpebral region.

Etiology

- Primary factors:
 - Tear film dryness (hot, dry climates)
 - UV light exposure (damage to corneal epithelium, Bowman's membrane, stroma)
 - Precipitating factors: Chronic conjunctival infection, dust exposure
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Pathology

- Degenerative & hyperplastic changes:
 - Subconjunctival tissues undergo elastotic degeneration
 - Proliferation of vascularized granulation tissue
→ encroaches onto cornea
 - Corneal involvement: Superficial epithelium, Bowman's membrane, stroma damaged
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Types

Type	Features
Progressive	Thick, fleshy, vascular, anterior cap infiltration
Stationary	No progression, stable
Regressive	Thin, atrophic, minimal vascularity

Stages

Stage	Corneal Extension	Effect
1	<2 mm	Usually asymptomatic
2	Up to 4 mm	Tear film disruption, astigmatism
3	>4 mm	Visual axis involvement, mechanical obstruction

Clinical Features

- More common in hot climates, nasal side predominance
- Triangular fibrovascular growth with apex toward cornea
- Stocker line: Linear iron deposition anterior to head
- Vision may be affected due to astigmatism or mechanical obstruction
- Diplopia may occur if ocular motility limited

Treatment

Non-Surgical

- Tear substitutes
- Topical steroids for inflammation
- Sunglasses (UV protection)

Surgical

- Indications: Stage 2-3 (visual threat), stage 1 (cosmetic)
- Procedures:
 - Simple excision (bare sclera) → high recurrence (~80%)
 - Conjunctival flap / autograft
 - Amniotic membrane transplantation
 - Adjuncts: Mitomycin C, beta radiation, argon laser, peripheral lamellar keratoplasty

Post-Operative Complications

- Recurrence (common, aggressive)
 - Pyogenic granuloma (rapidly growing vascular lesion)
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Pseudopterygium ⚡

Definition

A fold of bulbar conjunctiva attached to the cornea.

Causes 🔥

- Corneal injuries (trauma or chemical burns)
- Peripheral corneal ulcers

Clinical Features 👁️

- Adhesion of conjunctiva to peripheral cornea
- Can occur in any quadrant
- Probe can be passed under the neck
- Diplopia may occur due to ocular movement restriction

Treatment

- Surgical excision is the only satisfactory treatment
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Differences Between Pterygium & Pseudopterygium



Points	Pterygium	Pseudopterygium
Aetiology	Degenerative, common in elderly, interpalpebral, may be progressive/stationary/regressive	Inflammatory process
Age	Usually older adults	Any age
Site	Interpalpebral region	Can occur anywhere
Types	Progressive, stationary, regressive	Always stationary

Probe test	Probe cannot pass underneath	Probe can pass underneath
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-> The End <-