

EDUCATIONAL MOMENTS®



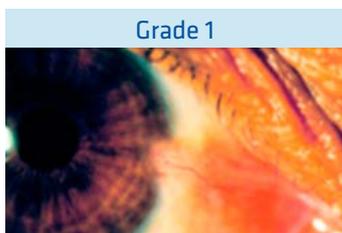
How to manage patients with pterygium

WHAT YOU NEED TO KNOW

Slit Lamp Viewing:

1. Diffuse beam
2. Medium magnification (16x)
3. Direct illumination

Grading:



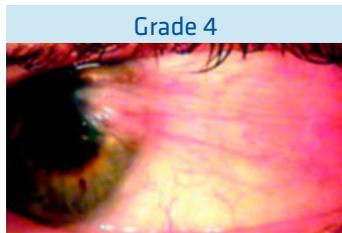
Grade 1



Grade 2



Grade 3



Grade 4

- Grade 0: None visible
- Grade 1: Touching limbus
- Grade 2: 1-2mm inside limbus
- Grade 3: 2-3mm inside limbus
- Grade 4: >3mm inside limbus

Incidence:

- Environment affects development - incidence varies depending on geographical location (levels of UV exposure) and if closer to equator, more likely to develop pterygium
- Prevalence rates vary from < 2% in upper latitudes to 36% in lower latitudes
- Heredity affects incidence (more common in persons of Spanish and Oriental origin)
- Not CL related but may impact on CL wear

Aetiology:

- Degenerative collagen bundles in bulbar conjunctiva due to excessive exposure of the bulbar conjunctiva to hot, dry, windy climates and/or UV radiation

Symptoms:

- Some discomfort with or without lens wear, dryness
- Cosmetic concerns
- Vision affected if becomes large

Signs:

- Triangular growth fibrovascular tissue on bulbar conjunctiva, usually nasal, which encroaches onto cornea and destroys Bowman's membrane
- Often bilateral

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WHAT YOU NEED TO RECOMMEND TO YOUR PATIENTS

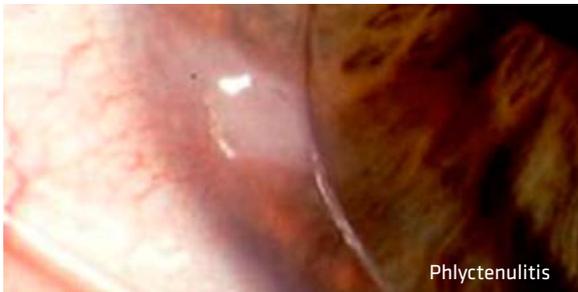
Recommendations:

- Only if discomfort occurs or if it interferes with vision – avoid mechanical trauma
- Not a contraindication for CL wear
- Occasional use of vaso-constrictors and ocular lubricants
- If severe, surgical removal may be required

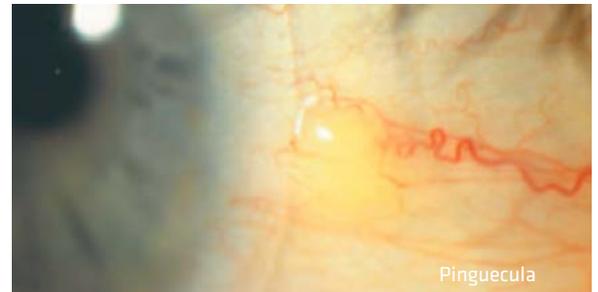
Prognosis:

- CL fitting possible as long as satisfactory physical fit can be obtained
- If surgical removal required, prognosis fair although re-growth occurs in 40 % cases
- Note: condition associated with 2-3X increased risk of incident late and early ARMD

Differential Diagnosis:



Phlyctenulitis - chronic inflammatory complication resulting in elevated, semi-opaque epithelial lesion at limbus with conjunctival hyperaemia, corneal staining and neovascularisation; secondary to allergic response or due to rigid lens design (also known as Vascularised Limbal Keratitis VLK).



Pinguecula – see previous moment on Pinguecula.

Pseudopterygium – a fold of conjunctiva that has become attached to the cornea as a result of injury; can pass a probe beneath it near the limbus, but not possible in true pterygium.

This series is adapted from A Handbook of Contact Lens Management (3rd Edition) published by THE VISION CARE INSTITUTE®

HOW TO FIND OUT MORE

- Click [here](#) for a general refresher on slit lamp techniques
- Click [here](#) to watch our educational video on slit lamp examination using diffuse illumination
- Click [here](#) for our guide to the cumulative effects of UV on the eye
- Click [here](#) to read more about UV ocular protection strategies
- Click [here](#) for a further reading list and references

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PATIENT CASE STUDY



Patient SP is a 45-year-old engineer who has been working in the construction industry in the Middle East for the past five years.

She wears monthly replacement silicone hydrogel lenses with no UV blocker incorporated.

Although she has noticed her eyes appear red she reports no discomfort with or without her lenses.

Quiz:

1. What slit lamp technique would you use to examine this patient's bulbar conjunctiva?

- A. Sclerotic scatter
- B. Diffuse beam, medium illumination
- C. High magnification
- D. Indirect illumination

2. What grade would you give to his pterygium?

- A. Grade 1
- B. Grade 2
- C. Grade 3
- D. Grade 4

3. Which of the following environmental conditions are associated with this condition?

- A. Air-conditioned offices
- B. Shady conditions
- C. High levels of UV radiation
- D. Humid conditions

4. Which of the following contact lens options would you recommend for this patient?

- A. Switch to UV-blocking contact lenses
- B. Refit with RGP lenses
- C. Cease contact lens wear permanently
- D. Orthokeratology

Correct answers:

- 1: **B.** Use a diffuse beam, medium magnification and direct illumination to examine the bulbar conjunctiva.
- 2: **A.** Grade 1 Slit-lamp examination of the bulbar conjunctiva shows the pterygium just touching the limbus.
- 3: **C.** High levels of UV radiation, along with living in equatorial regions, are associated with pterygium.
- 4: **A.** Assuming a satisfactory fit can be achieved. Advising UV-blocking contact lenses, with a wide-brimmed hat and wraparound sunglasses can help protect eyes from UV transmission.*

* UV-absorbing contact lenses are not substitutes for protective UV absorbing eyewear such as UV absorbing goggles or sunglasses as they do not completely cover the eye and surrounding area.