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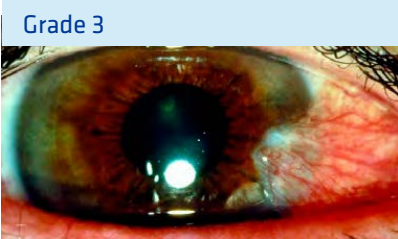
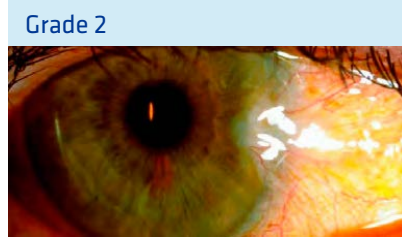
How to manage patients with Pterygium

WHAT YOU NEED TO KNOW

Slit Lamp Viewing:

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

Grading:



- Grade 0: None visible at limbus
- 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 contact lens 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 due to corneal distortion inducing astigmatism

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

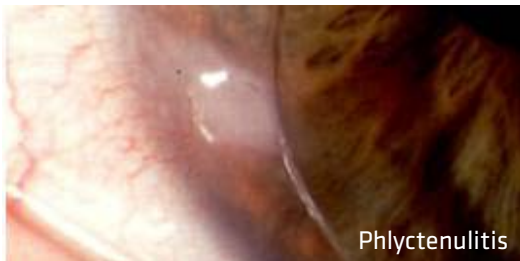
Recommendations :

- 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
- UV protection to slow down/prevent further progression with wide-brimmed hat, wrap around sunglasses and UV - blocking contact lenses.

Prognosis:

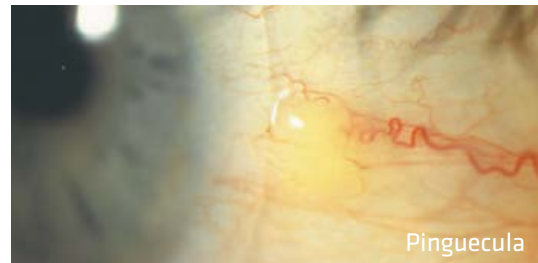
- CL fitting possible as long as satisfactory physical fit can be obtained
- If surgical removal required, prognosis fair although re-growth occurs in 40% cases
- Note: condition associated with 2-3X increased risk of incident late and early ARMD

Differential Diagnosis:



Phlyctenulitis

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

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 Johnson & Johnson Vision Care Institute

HOW TO FIND OUT MORE

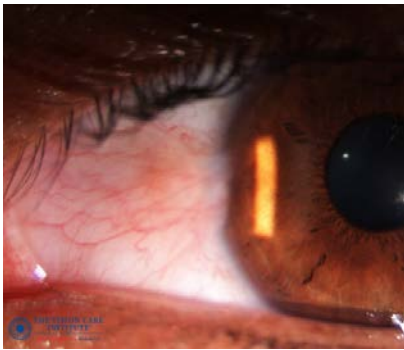
- ❖ Click [here](#) for a general refresher on slit lamp techniques
- ❖ Click [here](#) to watch our educational video on slit lamp examination using diffuse illumination
- ❖ Click [here](#) for our guide to the cumulative effects of UV on the eye
- ❖ Click [here](#) to read more about UV ocular protection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

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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.

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FURTHER READING/REFERENCES

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