WHAT YOU NEED TO KNOW

Slit Lamp Viewing:
1. Diffuse beam 2. Medium magnification (16x) 3. Direct illumination (4) With and without fluorescein

Grading:

Grade 0.5

Grade 1

Grade 2

Grade 3

Grade 4

Incidence:
• Variable time of onset and severity: varies over years with different lenses and care regimens
• 2% RGPs, 2%-15% hydrogel daily wear, 2%-19% hydrogel extended wear, 2%-7% silicone hydrogels (SiHs)
• Significantly reduced since the introduction of frequent replacement CLs
• Increased incidence with EW, non-planned replacement and higher modulus materials (mechanical related)

Aetiology:
• Conjunctival inflammatory condition associated with CLs and trauma
• Immunological response – immediate hypersensitivity (denatured deposits, solution toxicity)
• Mechanical response (lens design or material modulus, prostheses and sutures)
• Associated with atopy and MGD short-term clinical sign of corneal hypoxia – related to oxygen performance of lens

Symptoms:
• Lens awareness, CL intolerance, foreign body sensation, itching which may increase on lens removal
• Mucus formation, visual disturbance (lens dislocation, deposition and mucus

Signs:
• Papillae (>0.3mm) on upper tarsal conjunctiva with central vascular tuft, mucus discharge, tarsal conjunctival hyperaemia and oedema
• Displaced CL and excessive movement with poor surface wetting and deposits
• Location of Papillae on upper tarsal conjunctiva tends to appear more localised with SiH

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How to manage patients with Lid Roughness (Contact Lens Associated Papillary Conjunctivitis or CLPC)
WHAT YOU NEED TO RECOMMEND TO YOUR PATIENTS

**Recommendations:**
- Manage if ≥ grade 2 or ≥ 1 grading interval increase or if patient is symptomatic
- Lens wear can continue if symptoms allow
- Improve lens hygiene (daily surfactant cleaning, change care system to preservative free)
- Increase lens replacement frequency (ideally daily disposable), replace existing lenses
- Alter RGP lens design and/or thickness or use lower modulus soft lens material
- Introduce lid hygiene if signs of lid margin disease
- If severe, temporary cessation lens wear with topical mast cell stabilisers or steroids
- Advice on management of seasonal allergic conjunctivitis

**Prognosis:**
- Good, especially with frequent replacement lenses, although papillae can remain for months
- Better with early detection — resolves within 2-3 weeks if mechanical, longer if inflammatory cause
- Up to 60% recurrence with SiH EW

**Differential Diagnosis:**
- Follicles — vessels on outside. Inferior tarsal conjunctivitis — not CL related.
- Vernal conjunctivitis — no vessels (young males, both inferior and upper tarsus).

**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 a further reading list and references
EDUCATIONAL MOMENTS®

How to manage patients with Lid Roughness (Contact Lens Associated Papillary Conjunctivitis or CLPC)

PATIENT CASE STUDY

Patient CB is a 29-year-old management trainee who has worn the same brand of monthly replacement silicone hydrogel lenses since she started wearing contact lenses 8 years ago.

She visits your practice for the first time complaining of severe itching with and without her lenses, ‘sticky’ eyes and having to remove the lenses after 6 hours’ wear.

Quiz:

1. What slit lamp technique would you use to examine this patient’s upper lids?
   A. Narrow beam
   B. White light and fluorescein
   C. High magnification
   D. White light only

2. What grade would you give to her lid roughness?
   A. Grade 2.5
   B. Grade 3.0
   C. Grade 3.5
   D. Grade 4.0

3. What material properties are associated with lid roughness?
   A. Lens modulus
   B. Surface characteristics
   C. Lens design
   D. All of these

4. Which of the following management options would you be most likely to choose?
   A. Switch to daily disposable lenses
   B. Refit with RGP lenses
   C. Discontinue lens wear permanently
   D. Continue with these lenses, reduce wearing time

Correct answers:
1. B. Evert the lids and use both white light and fluorescein (right), with a diffuse beam and medium magnification.
2. C. The patient’s lid shows papillae with vessels, and should be recorded grade 3.5 lid roughness.
3. D. These material properties are all implicated as contact lens related causative factors in lid roughness
4. A. The correct answer is A. Daily disposables may be the best option in this particular case, especially during the hayfever season.