WHAT YOU NEED TO KNOW

Slit Lamp Viewing:
1. Diffuse beam    2. Medium magnification (16x)  3. Direct illumination

Grading:

Grade 0
Grade 1
Grade 2
Grade 3
Grade 4

Grade 0: None
Grade 1: Slight injection of conjunctival vessels
Grade 2: Mild injection
Grade 3: Moderate injection
Grade 4: Severe injection
Position: Superior, nasal, inferior, temporal

Incidence:
• 15-20% CL wearers, with 20-35% clinically significant
• Approximately 15% non-CL wearers ≥ grade 2

Aetiology:
• Solution toxicity
• CL deposition (left)
• Dry eye symptomatology
• Pathological dry eye (KCS)
• Allergic reaction
• Infection – MK
• Inflammation – CLARE, CLPU, IK
• Mechanical – poor lens fit, trauma
• Metabolic – Corneal hypoxia, hypercapnia
• Poor general health (especially influenza, throat infection or substance abuse)

Symptoms:
• May be asymptomatic – depends on cause
• Associated with CL intolerance, dryness, burning and itching

Signs:
• Bulbar redness can be localised or full coverage
• Amount and pattern depends on lens type: for RGP wearers, it tends to be along the horizontal meridian (chronic drying); for hydrogel lens wearers, hyperaemia tends to be diffuse

EDUCATIONAL MOMENTS

How to manage patients with Bulbar Redness (Bulbar Conjunctival Hyperaemia)

© Johnson & Johnson Medical Limited 2016.
WHAT YOU NEED TO RECOMMEND TO YOUR PATIENTS

Recommendations:
• Manage if ≥ grade 2 or if ≥ 1 grading scale increase or if symptoms occur
• Lens wear may continue if symptoms allow
• Remove the cause
• Refit with higher oxygen performance materials
• Change lens material to reduce dryness
• Ocular lubricants

Prognosis:
Good – although some wearers always exhibit hyperaemic eyes

Differential diagnosis:
Subconjunctival haemorrhage, conjunctivitis, keratitis, uveitis, acute glaucoma

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 THE VISION CARE INSTITUTE® clinical grading scales and assessment guide
❖ Click here for a further reading list and references
EDUCATIONAL MOMENTS

How to manage patients with Bulbar Redness (Bulbar Conjunctival Hyperaemia)

PATIENT CASE STUDY

Patient GC is a 19-year-old university student who has worn daily disposable hydrogel lenses for sports and social use for the past three years. He wears his lenses 4-5 times a week for football training, matches and social events. At a routine aftercare appointment he presents with red, slightly sore eyes and reports that he has worn his lenses for the past 36 hours without removal.

Quiz:

1. What slit lamp technique would you use to examine this patient’s bulbar conjunctiva?
   - A. High magnification, narrow beam
   - B. Indirect retro illumination
   - C. Direct illumination, medium magnification
   - D. Specular reflection

2. What grade would you give to his bulbar redness?
   - A. Grade 1
   - B. Grade 2
   - C. Grade 3
   - D. Grade 4

3. Which of the following techniques is most appropriate to the differential diagnosis of bulbar redness?
   - A. Slit lamp examination of the cornea
   - B. Keratometry
   - C. Over-refraction
   - D. Checking lens fit

4. Which of the following management options could you consider?
   - A. Emphasise the need to discard lenses daily and never wear them overnight
   - B. Confirm spectacle Rx up to date
   - C. Re-emphasise the importance of hygiene
   - D. All of these options

Correct answers:
1. C. Using a diffuse beam, 16x magnification and direct illumination is best for examining the bulbar conjunctiva
2. C. The patient’s bulbar conjunctiva shows moderate redness and should be graded 3.
3. A. Check carefully with high magnification for any corneal involvement such as infiltrative keratitis (right).
4. D. If the cornea is not involved, continue lens wear, manage WT and hygiene and ensure spectacles current.