

IACLE Distance Learning Program (DLP)

Phase 3 Assignment 8:

Course content covered:

D1. Defending the Ocular Surface in Contact Lens Wear

D2. Rigid Contact Lens Complications

From the New IACLE Contact Lens Course (New ICLC)

ASSIGNMENT 8

Read the questions carefully and record your answers on the answer sheet template

1. **Contact Lens-induced Acute Red Eye (CLARE) is usually associated with:**
 - a. Significant bacterial colonization of the cornea and conjunctiva
 - b. High numbers of Gram-positive bacteria on the CL
 - c. High numbers of Gram-negative bacteria on the CL
 - d. Fungal colonization of the CL

2. **Typically, protozoans are classified with reference to their:**
 - a. Means of movement (motility)
 - b. Preferred habitat
 - c. Ability to encyst under adverse conditions
 - d. Potential to cause disease

3. **CL-related Microbial Keratitis (MK) is most commonly associated with which organism?**
 - a. *Fusarium solani*
 - b. *Staphylococcus aureus*
 - c. *Candida albicans*
 - d. *Pseudomonas aeruginosa*

4. **Which one of the following is NOT a major tear protein?**
 - a. Lysozyme
 - b. Lipocalin
 - c. Albumin
 - d. Lactoferrin

5. **The most common Gram-positive bacteria isolate found on the ocular surface in EW CLs is:**
 - a. *Staphylococcus aureus*
 - b. *Candida albicans*
 - c. *Pseudomonas aeruginosa*
 - d. *Staphylococcus epidermidis*

6. **The most common Gram-positive bacterial isolate found on the ocular surface with DW CLs is:**
 - a. *Staphylococcus capitis*
 - b. *Candida albicans*
 - c. *Pseudomonas aeruginosa*
 - d. *Staphylococcus epidermidis*



- 7. The most common sources of CL contamination in asymptomatic CL wearers is:**
 - a. CL handling
 - b. The CL care product(s) used
 - c. The ocular biota
 - d. Contaminated eye cosmetics

- 8. The most uncommon isolate found in cultures of asymptomatic CL wearers is:**
 - a. Staphylococcus aureus
 - b. Candida albicans
 - c. Pseudomonas aeruginosa
 - d. Staphylococcus epidermidis

- 9. Which one of the following statements is NOT true with respect to biofilms?**
 - a. Contains many slow growing bacteria
 - b. Common in CL storage cases
 - c. More resistant than planktonic organisms
 - d. Highly resistant to the antimicrobial compounds in use

- 10. The most common micro-organisms found in CL storage cases rinsed in tap water are:**
 - a. Gram-negative bacteria
 - b. Gram-positive bacteria
 - c. Amoebae
 - d. Fungi

- 11. In EW of silicone hydrogel CLs (SiHy CLs), CL infiltrative events (CIEs) are more likely to be apparent:**
 - a. All over the cornea, near the limbus
 - b. In the central cornea
 - c. In the superior cornea
 - d. In the inferior cornea

- 12. A five times (5X) greater risk of CL infiltrative events (CIEs) is reported in:**
 - a. Extended wear of conventional hydrogel CLs
 - b. Extended wear of SiHy CLs
 - c. In young males who smoke
 - d. Continuous wear of SiHy CLs

- 13. The tear protein lysozyme is most active against:**
 - a. Gram-negative bacteria
 - b. Gram-positive bacteria
 - c. Amoebae
 - d. Viruses



- 14. Which one of following is a minor tear protein involved in host defences?**
- Lipocalin
 - Lysozyme
 - Cytokines
 - Mucin
- 15. The functions of antibodies include all except:**
- Neutralize toxins
 - Aid in phagocytosis
 - Activate complement
 - Suppress white blood cells to reduce inflammation
- 16. As a defence mechanism, Giant Papillary Conjunctivitis (GPC or CLPC) induces an increase in:**
- T cells
 - Dendritic cells
 - Mast cells
 - B cells
- 17. Which one of the following decreases in number during CL wear?**
- T cells
 - PolyMorphoNuclear leukocytes (PMNs)
 - Mast cells
 - B cells
- 18. In cases of CLARE, increased PolyMorphoNuclear leukocytes (PMNs) numbers are seen in:**
- The corneal stroma
 - The epithelium
 - The lids
 - Reflex tears
- 19. Which one of the following is NOT appropriate to the management of vascularized limbal keratitis (VLK) associated with RGP CLs?**
- Redesign CL to achieve moderate edge lift
 - Use in-eye wetting drops
 - Fit larger CLs
 - Reduce CL wearing time
- 20. Which one of the following slit-lamp illumination techniques is best for observing corneal wrinkling?**
- Direct illumination
 - Sclerotic scatter
 - Tangential illumination
 - Marginal retro-illumination



- 21. Which statement about 3 & 9 o'clock staining is INCORRECT?**
- Can improve with blinking exercises
 - Increases over time
 - Usually unilateral
 - Staining areas are usually those not covered by the CL
- 22. Anterior eye debris can be flushed from the eye using any of the following EXCEPT:**
- Sterile saline solution
 - Artificial tears
 - RGP multi-purpose solution
 - In-eye wetting solution
- 23. 'Smile' and desiccation staining are thought to be due to:**
- Oedema of the corneal epithelium
 - Depletion of the aqueous phase of the post-lens tear film (PLTF)
 - Solution toxicity
 - CL surface deposits
- 24. Which one of the following factors is LEAST likely to cause or contribute to RGP CL warpage?**
- Inadequate CL thickness
 - CL cleaning in the palm of the hand
 - Dry CL storage
 - Using a CL storage case with a flat bottom
- 25. Typically, all of the following would improve RGP CL comfort, EXCEPT:**
- Minimizing front surface junction angles
 - Reducing the CL's total diameter (TD)
 - Minimizing the axial edge lift
 - Rounding the CL's anterior edge
- 26. Therapeutic management of CLPC includes all except:**
- A mast cell stabilizer
 - A combination stabilizer & antihistamine
 - A histamine blocker
 - A topical antibiotic
- 27. Therapeutic management of Dellen includes which one of the following:**
- Ocular lubricants
 - Topical antibiotics
 - Mild steroids
 - Histamine blockers



- 28. Which one of the following statements regarding corneal warpage in rigid CL wearers is NOT true?**
- Subjective refraction is variable with no clear refraction end point
 - Vision typically returns to normal soon after CL removal
 - Keratometry mires are distorted
 - The chief underlying cause is poor corneal physiology
- 29. Which one of the following is NOT typical of RGP CL adherence?**
- Conjunctival redness
 - Most common in the nasal quadrant
 - Corneal indentation caused by adherent CL's edge
 - Adherent front surface debris
- 30. The aetiology of corneal Dellen might include all of the following EXCEPT:**
- An RGP CL with a thin edge
 - A pinguecula
 - Recent rectus muscle surgery
 - A relatively dry corneal surface