



# **IACLE Distance Learning Program (DLP)**

## **Phase 2 Assignment 4:**

**Course content covered:**

**B2. Selecting Lens Type, Wear Mode and Replacement Rate**

**B3. Fitting Spherical GP Contact Lenses**

**From the New IACLE Contact Lens Course (New ICLC)**

## ASSIGNMENT 4

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

1. **The strongest motivation to opt for CLs over the alternatives is:**
  - a. Inconvenience of spectacles
  - b. Improved vision
  - c. The vision therapy they offer
  - d. Sports / recreation
  
2. **A 28 years old previous CL wearer discontinued CL wear about a year ago because of recurring redness, their eyes feeling dry, and blurring of vision after 4-5 hours of CL wear. The ideal CL for this case is:**
  - a. RGP CLs
  - b. SiHy monthly replacement CLs
  - c. Daily disposables (DD CLs)
  - d. Scleral CLs
  
3. **Which one of the following is NOT recommended when managing a person using hydrogel CLs and experiencing spectacle blur?**
  - a. Change to SiHy CLs
  - b. Change to RGP CLs
  - c. Continue wearing the same CLs, but shorten the wearing time
  - d. Change to bi-weekly, thinner hydrogel CLs
  
4. **Which one of the following RGP CL Total Diameters (TDs) would be MOST suitable for a patient with a horizontal visible iris diameter (HVID) of 12 mm?**
  - a. 10.00 mm
  - b. 12.00 mm
  - c. 13.50 mm
  - d. 14.00 mm
  
5. **When selecting the water content and centre thickness ( $t_c$ ) of conventional SCL materials, which of the following would be the MOST suitable choice for a patient with significant hyperopia and marginally dry eyes?**
  - a. High water content CL with thin  $t_c$
  - b. Low water content CL with thin  $t_c$
  - c. Low water content CL with thick  $t_c$
  - d. High water content CL with thick  $t_c$
  
6. **Each of the following SCL replacement schedules requires some form of CL care and maintenance EXCEPT:**
  - a. Conventional
  - b. Frequent replacement
  - c. Disposable
  - d. Daily disposable



7. **Which of the following SCL replacement schedules would be MOST suitable for a patient who has a history of contact lens-induced papillary conjunctivitis (CLPC)?**
  - a. Conventional (annual replacement)
  - b. Frequent replacement
  - c. Disposable
  - d. Daily disposable
  
8. **What would the MOST suitable combination of RGP material permeability and CL centre thickness ( $t_c$ ) for a myopic patient with a significant amount of corneal toricity?**
  - a. High Dk / medium  $t_c$
  - b. Low Dk / medium  $t_c$
  - c. High Dk / thin  $t_c$
  - d. Low Dk / average  $t_c$
  
9. **On placing a new (just delivered) RGP CL on the eye, the clinician notices that vision is not as good as it was with during the trial CL evaluation. A slit-lamp examination reveals a poor wetting surface which is most likely due to:**
  - a. The CL material has a low DK
  - b. The CL's FOZR is irregular
  - c. The CL was over polished
  - d. The eyes are secreting excessive amounts of lipid
  
10. **Which of the following is IRRELEVANT to a static CL fit assessment?**
  - a. No lid influences
  - b. Evaluated in primary gaze
  - c. Assess tear layer thickness between CL and cornea
  - d. Movement evaluated immediately after a blink
  
11. **The best method of fluorescein instillation using an impregnated fluorescein strip moistened with saline, is to touch the moisten tip tangentially to the:**
  - a. Lower Fornix
  - b. CL front surface
  - c. Cul-de-sac
  - d. Superior bulbar conjunctiva
  
12. **The following are ways to loosen the fit of a steep-fitting RGP CL, EXCEPT:**
  - a. Increase BOZR
  - b. Decrease BOZD
  - c. Decrease Total Diameter (TD)
  - d. Increase Total Diameter (TD)



- 13. A +6.00 D CL appeared to fit tightly as demonstrated by reduced on-eye movement. The best way to loosen the fit by shifting the Centre of Gravity anteriorly is best done by:**
- Decrease total diameter 0.1mm
  - Flatten BOZR by 0.05mm
  - Decreasing Centre Thickness 0.01mm
  - Increasing centre thickness by 0.05mm
- 14. What is the term for the discrete pooling of fluorescein in depressions/pits in the corneal epithelium, caused by air bubbles trapped underneath a rigid CL?**
- Central corneal clouding
  - Corneal desiccation
  - Dimple veiling
  - Punctate staining
- 15. Excessive edge clearance in an RGP CL can result in all of the following EXCEPT:**
- Decentres superiorly
  - Dimple veiling
  - 3 & 9 o'clock staining
  - Corneal oedema
- 16. A patient is wearing an RGP trial CL with a BOZR of 8.00 mm and a BVP of +8.00 DSph which accurately compensates for his refractive error. However, the trial CL shows an apical touch fluorescein pattern so a final CL of the same Total Diameter (TD), but with a BOZR of 7.90 mm is to be ordered. What should the BVP of this final CL be?**
- +7.50 D
  - +7.75 D
  - +8.25 D
  - +8.50 D
- 17. A rigid gas permeable (RGP) CL with a back optic zone radius (BOZR) of 7.60 mm, and back vertex power (BVP) of -3.00 DS, corrects a patient's refractive error accurately. We now want to fit this eye with a new CL of the same TD, but with a BOZR of 7.70 mm. What should the BVP of this new CL be?**
- 2.00 D
  - 2.50 D
  - 3.00 D
  - 3.50 D

- 18. All of the following are likely to result from an RGP CL exhibiting a steep or tight fit in the periphery and mid-periphery, EXCEPT:**
- Unstable CL fit
  - Inadequate tear exchange
  - Compression and indentation of the corneal epithelium
  - Tear debris trapped under the CL
- 19. An RGP CL with a BOZR of 7.85 mm and a TD of 9.40 mm is placed on an eye. The static fitting evaluation shows a limited zone of central touch, and an excessive amount of fluorescein in the mid-periphery and peripheral zone. It is decided to fit this eye with a new CL of the same TD but with an alignment fit. Which of the following BOZR's would be MOST appropriate for the new CL?**
- 7.75 mm
  - 7.85 mm
  - 7.90 mm
  - 7.95 mm
- 20. All of the following are typical characteristics of a tight RGP CL fitting, EXCEPT:**
- Fluorescein pattern showing distinct apical pooling
  - Heavy contact zone in the mid-periphery of the cornea
  - Good centration and stability
  - Significant edge clearance and excessive edge width
- 21. What is the desired amount of post-blink movement that an RGP CL should display?**
- 0.00 to 0.50 mm
  - 0.25 to 0.75 mm
  - 1.00 to 2.00 mm
  - 2.25 to 3.75 mm
- 22. Reducing the total diameter (TD) of an RGP CL could affect all of the following CL parameters or fitting characteristics, EXCEPT:**
- Centre-of-gravity
  - Back vertex power (BVP)
  - Axial edge lift (AEL)
  - Peripheral curve width
- 23. Reducing the total diameter (TD) of an RGP CL without changing the BOZR may result in all of the following, EXCEPT:**
- Tightening of the CL fit
  - Increased CL movement
  - Increased CL decentration
  - Loosening of the CL fit



- 24. An RGP CL wearer complains of flare and haloes at night. Which one of the following is the MOST likely cause of this problem?**
- CL material is of poor quality
  - Inadequate CL power
  - Back optic zone diameter (BOZD) is too small
  - CL flexure
- 25. The fluorescein pattern of a spherical RGP CL on a low-toricity cornea shows a zone of central touch with a wide and flat peripheral edge fit. What type of post-blink movement (if any) is this CL MOST likely to display in primary gaze?**
- Smooth movement across the corneal surface
  - Rotation around the corneal apex from the superior to inferior position
  - Little or no CL movement
  - Rocking motion about the flatter meridian
- 26. Which of the following RGP CL parameter changes will move the centre-of-gravity of the CL posteriorly?**
- Increasing minus power
  - Flatter BOZR
  - Reducing CL TD (Total Diameter)
  - Fitting a thicker CL
- 27. Which of the following could be the result of excessive edge clearance of an RGP CL?**
- Reduced CL movement
  - Minimal tear exchange
  - Corneal indentation
  - Poor centration
- 28. Reducing the thickness of an RGP CL can result in all of the following, EXCEPT:**
- Increased CL movement upon blinking
  - Improved oxygen transmissibility
  - Increased CL flexure on the cornea
  - A more posterior center-of-gravity
- 29. When refitting a long-term PMMA CL wearer, the BEST approach is to:**
- Refit immediately
  - Cease CL wear for a minimum of 2 weeks, then refit
  - Refit after one day of no CL wear
  - Cease CL wear until the K readings stabilize, then refit
- 30. The following modifications are possible with a finished RGP CL EXCEPT:**
- Decrease in BOZD
  - Increase in BOZD
  - Flattening the peripheral curves
  - Increasing minus power by 0.25 DSph