



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

## **Phase 4 Assignment 10:**

### **Course content covered:**

**E1. Children and Contact Lenses**

**E2. Fitting Scleral and Mini-Scleral Contact Lenses**

**E3. Myopia Control and Orthokeratology**

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

## ASSIGNMENT 10

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

- 1. The curvature of the human cornea at birth is:**
  - a. Steeper than in adults and gradually flattens for up to about 10 years
  - b. Approximately the same as an adult's
  - c. Flatter at birth and changes to become steeper
  - d. Remains steeper than in adults for up to about 10 years
  
- 2. The eye's axial length (AL) changes from infant to adult as follows:**
  - a. It remains at 20 mm
  - b. It changes from 17 mm to 20 mm
  - c. It changes from 17 mm to 24 mm
  - d. It changes from 20 mm to up to 28 mm.
  
- 3. Paediatric CL fitting is influenced by all of the following EXCEPT:**
  - a. Palpebral aperture size (PAS)
  - b. Strong orbicularis oculi muscle tone
  - c. Decreased blink frequency
  - d. Tear volume
  
- 4. Which one of the following is NOT a consideration in the management of refractive error with CL?**
  - a. Complete healing if patient has undergone ocular surgery
  - b. Having an adult in the family who wears CLs and can offer help and advice
  - c. Ability to comply with instructions and the availability of CL care products
  - d. Explanation about likely ongoing expenses
  
- 5. CLs are advantageous in aphakia for all of the following reasons EXCEPT:**
  - a. Increased image magnification
  - b. Wider field-of-view
  - c. Significantly decreased distortion & aniseikonia
  - d. Only practical choice for unilateral cases
  
- 6. Which statement regarding the fitting of lenticulated, aphakic, rigid CLs is INCORRECT?**
  - a. CL Total Diameter (TD) should be at least 1.5 mm larger than the FOZD, for an effective minus carrier
  - b. Smaller CL diameters may reduce the severity of 3 and 9 o'clock staining
  - c. Usual fitting philosophy is to choose a BOZR that gives apical clearance
  - d. A smaller FOZD can be ordered to reduce the centre thickness



- 7. All of the following are advantages of preformed scleral CLs, EXCEPT:**
- CL parameters are known accurately
  - Patients can experience a CL prior to final fitting and ordering
  - Easy to fit on highly toric corneas
  - Can be made thinner than molded CLs
- 8. Which one of the following would MOST likely be a suitable candidate for scleral CLs?**
- A patient exhibiting pervaporation staining
  - A patient requiring prism in their Rx
  - A patient with axial anisometropia
  - A patient who wants a 'cure' for keratoconus
- 9. All of the following factors are essential for a good scleral CL fit, EXCEPT:**
- Adequate tear layer thickness
  - Perilimbal touch
  - Corneal clearance
  - Absence of air bubbles
- 10. The desired final apical clearance (vault) with a full scleral CL is:**
- 50 – 150 microns
  - 200 – 400 microns
  - 400 - 600 microns
  - Simply, more than 400 microns
- 11. Conjunctival blood vessel compression with a scleral CL requires:**
- Loosening of the periphery of the scleral CL
  - Tightening of the periphery (haptic) of the scleral CL
  - No change
  - An increase in the sag of the CL
- 12. A typical scleral CL fit shows:**
- Minimal to no movement
  - At least 1 mm of movement
  - 2 mm of movement
  - 3 – 4 mm of movement
- 13. The sagittal depth of an Ortho-K fitting is controlled by varying the:**
- Total diameter (TD)
  - Back optic zone diameter (BOZD)
  - Treatment zone parameters
  - Reverse curve radius or return zone depth



**14. All of the following are considered ideal end-point criteria for orthokeratology, EXCEPT:**

- a. Uncorrected visual acuity of 6/6 or better
- b. Hyperopia of at least 3 Dioptre after CL removal
- c. Bulls-eye pattern topography
- d. Minimal regression over 10 – 12 hour following CL removal

**15. What should the practitioner do if dimple veiling is seen in an orthokeratology patient within an hour of awakening?**

- a. Ignore it
- b. Refit with a CL of the same parameters but in a more gas permeable material
- c. Promptly remove the CL and cease overnight CL wear
- d. Refit with a flatter CL to decrease post-lens tear film depth

**16. If a subtractive corneal topography plot shows a ‘smiley face’ pattern, what can be deduced about the CL used for orthokeratology?**

- a. A TD that is too large
- b. A CL fit that is too steep
- c. The CL sag is too great
- d. The BOZR is too flat

**17. A tight-fitting Ortho-K CL might be a result of:**

- a. The BOZR being too flat
- b. The TD being too small
- c. The tear reservoir being too deep
- d. The CL’s peripheral curve being too steep

**18. What is the MOST useful predictor of success in orthokeratology, according to Carkeet *et al.* (1995)?**

- a. Corneal rigidity
- b. Epithelial thickness
- c. Corneal diameter
- d. Initial refractive error

**19. All of the following have been postulated as mechanisms for explaining, at least partially, the effects of modern orthokeratology, EXCEPT:**

- a. Corneal bending
- b. Negative pressure
- c. Corneal thinning or thickening
- d. Corneal tissue redistribution

**20. Lateral decentration of an Ortho-K CL is likely to be due to:**

- a. Loose lids
- b. Asymmetric lids
- c. Eccentric corneal apex
- d. TD too large