

ASSIGNMENT 15

Material Covered:

***Part of Unit 7.4 (p380–444) of Module 7, and Unit 8.1 of Module 8
of the IACLE Contact Lens Course***

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Read the questions carefully and record your answers on the answer sheet provided.

1. **Following a penetrating keratoplasty, approximately what percentage of graft recipients requires contact lenses to achieve satisfactory vision?**
 - a. 50%
 - b. 60%
 - c. 70%
 - d. 80%

2. **Which one of the following statements regarding keratoconus is INCORRECT?**
 - a. Incidence of about 1 in 2000 in general population
 - b. Onset may be earlier in females than in males
 - c. Most cases present between the ages of 12 and 25
 - d. Lower incidence in Asians compared with Caucasians

3. **Some sodium fluorescein staining of the corneal epithelium is regarded as physiological. This staining is probably due to:**
 - a. Abrasion from airborne contaminants
 - b. Rubbing the eyes
 - c. Epithelial cell desquamation
 - d. Exotoxins from micro-organisms on the anterior eye

4. **All of the following are desired objectives when fitting a keratoconic cornea with contact lenses, EXCEPT:**
 - a. Minimize bubble formation
 - b. Ensure adequate tear exchange under the lens
 - c. Optimize lens movement
 - d. Retard cone progression using apical bearing

5. **When assessing a Schirmer tear test result after 5 minutes application, what 'wet length' is suggestive of a dry eye?**
 - a. 5 mm
 - b. 10 mm
 - c. 10 to 20 mm
 - d. >12 mm when an anaesthetic is used

6. **Which one of the following symptoms is NOT usually associated with keratoconus?**
 - a. Photophobia
 - b. Flare, especially at night
 - c. Pain
 - d. Monocular diplopia

7. **All of the following are typical signs of advanced keratoconus, EXCEPT:**
 - a. Striae of Vogt
 - b. Fleischer's iron ring
 - c. Decreased visibility of the corneal nerves
 - d. Corneal epithelial scarring

8. **Which one of the following preservatives was found by Holly (1978) to have the most deleterious effect on tear film lipid layer stability?**
 - a. Chlorhexidine
 - b. Benzalkonium chloride
 - c. Thimerosal
 - d. Isopropyl alcohol

9. **In what percentage of cases is keratoconus believed to be an inherited corneal abnormality?**
 - a. 6 to 10%
 - b. 10 to 25%
 - c. 25 to 35%
 - d. 25 to 50%

10. **The apparent increase in the incidence of forme fruste keratoconus is largely due to:**
 - a. Our greater understanding of the condition leading to greater vigilance
 - b. Newer information detailing the genetic inheritance of the condition
 - c. The wider use of slit-lamps with higher magnifications
 - d. The wider use of videokeratoscopes

11. **Which statement regarding the Phenol Red Thread Test (PRTT) is NOT true?**
 - a. Assesses basal tear film volume
 - b. Phenolsulphophthalein-impregnated cotton thread placed in inferior temporal fornix
 - c. Average 'wet length' immediately after removal is 9 mm
 - d. Less chance of causing reflex tearing than the Schirmer test

12. **Which one of the following conditions is NOT associated with keratoconus?**
 - a. Down syndrome
 - b. Fuch's dystrophy
 - c. Marfan syndrome
 - d. Pseudo-xanthoma elasticum

13. **Which one of the following tear evaluation tests is the LEAST invasive procedure?**
 - a. Tear meniscus assessment
 - b. Schirmer test
 - c. Phenol Red Thread Test
 - d. TBUT with Sodium Fluorescein

14. **Approximately what percentage of keratoconics eventually require some form of ocular surgery for their condition?**
- 5 to 10%
 - 10 to 20%
 - 20 to 30%
 - 30 to 40%
15. **Which one of the following is NOT an early sign of keratoconus?**
- Distorted retinoscopy reflex
 - Apical stromal thinning
 - Asymmetric steepening of keratometry mires inferiorly or centrally
 - Widened interpalpebral aperture
16. **Which one of the following is NOT an effect of contact lenses on the adapted anterior eye?**
- Altered mucus production
 - Tear film hypotonicity
 - Altered menisci along upper and lower lid margins
 - Increased tear film evaporation
17. **Why is neovascularization of an eye after a penetrating keratoplasty undesirable?**
- Unacceptable cosmesis
 - Topographical changes may adversely affect contact lens behaviour
 - Active blood vessels may induce graft rejection
 - Increased risk of subepithelial haemorrhaging
18. **Approximately what percentage of keratoconic cases presents after 40 years of age?**
- 5%
 - 25%
 - 50%
 - 85%
19. **Which one of the following patterns indicates the THICKEST tear lipid layer?**
- Closed meshwork
 - Flow pattern
 - Amorphous
 - Open meshwork
20. **According to Rabinowitz (1995, 1998), the diagnosis of keratoconus can be based on:**
- $K_s > 47.2$ D, inferior steepening (inf *cf.* sup) > 1.2 D, astigmatic axis skewed $> 21^\circ$
 - $K_s > 47.2$ D, inferior steepening (inf *cf.* sup) > 2 D, astigmatic axis skewed $> 30^\circ$
 - $K_s > 50$ D, inferior steepening (inf *cf.* sup) > 1.2 D, astigmatic axis skewed $> 21^\circ$
 - $K_s > 50$ D, inferior steepening (inf *cf.* sup) > 2 D, astigmatic axis skewed $> 30^\circ$