

作业 4

Material Covered:
Units 2.4, 2.5 and 2.6 of Module 2
of the IACLE Contact Lens Course

作业 4

仔细阅读题目，将答案写在答题纸上

1. **Each of the following instruments can be used to measure the overall diameter of a rigid gas permeable (RGP) lens, EXCEPT:**

- a. V-gauge
- b. Radiuscope
- c. Moiré fringe deflectometer
- d. Magnification loupe

1 下述仪器能用于 RGP 镜片的直径测量，除了：

- a. V-gauge
- b. Radiuscope
- c. Moiré fringe deflectomete
- d. Magnification loupe

2. **In altering the fit of a soft contact lens on the eye, which of the following statements is NOT true?**

- a. Increasing the total lens diameter will decrease the sagittal height
- b. Reducing the back optic zone radius (BOZR) will tighten the lens fit
- c. Reducing the total lens diameter will loosen the lens fit
- d. Increasing the BOZR of the lens will decrease the sagittal height

2 . 改变软镜的配适中，下述哪点是不正确的？

- a. 增加镜片的总直径，则降低了矢状高度
- b. 减少基弧(BOZR)，镜片配适变紧
- c. 减少镜片总直径，镜片配适变松
- d. 增加镜片基弧(BOZR)，则降低了矢状高度

3. **When designing and RGP lens, how much flatter than the BOZR is the back peripheral radius typically made?**

- a. 1.6 mm
- b. 2.5 mm
- c. 3.8 mm
- d. 6.0 mm

3 . 在 RGP 设计中，一般周边弧比基弧 (BOZR) 平坦多少？

- a. 1.6 mm
- b. 2.5 mm
- c. 3.8 mm
- d. 6.0 mm



4. **Which of the following types of soft contact lenses would MOST likely result in *pervaporation staining of the cornea*?**
- Thick, low water content lenses
 - Thick, high water content lenses
 - Thin, medium water content lenses
 - Thin, high water content lenses
4. 下述哪种软镜最容易导致由于蒸发导致的角膜染色？
- 厚、低含水量镜片
 - 厚、高含水量镜片
 - 薄、中等含水量镜片
 - 薄、高含水量镜片
5. **In evaluating the fluorescein pattern of an alignment fitting RGP lens, approximately how wide should the edge clearance ideally be?**
- 0.05 mm
 - 0.25 mm
 - 0.50 mm
 - 1.00 mm
5. 在平行配适的 RGP 荧光素图评估中，大致镜片边缘的宽度为：
- 0.05 mm
 - 0.25 mm
 - 0.50 mm
 - 1.00 mm
6. **What is the MOST important reason for wanting an RGP contact lens material to show good *wettability*?**
- Adequate oxygen permeability
 - Good optical regularity
 - Dimensional stability
 - Adequate lens centration
6. 希望 RGP 镜片材料有比较好的湿润性的主要原因是：
- 充分的氧的渗入
 - 比较好的光学特性
 - 空间稳定性
 - 良好的中央定位
7. **Which of the following parameter changes would shift the centre of gravity of a contact lens more posteriorly?**
- Reducing in overall lens diameter
 - Increasing the BOZR
 - Decreasing the lens thickness
 - Adding more minus power

7. 下述哪种参数的改变会使镜片的重心向后移？
- 降低镜片总直径
 - 增加镜片基弧
 - 降低镜片厚度
 - 增加更多的负镜度数
8. **What is the desired amount of axial edge lift of an alignment fitting RGP lens with a peripheral curve width of 0.30 – 0.50 mm?**
- 0.05 mm
 - 0.10 mm
 - 0.50 mm
 - 1.00 mm
8. 一平行配适的 RGP 镜片，镜片周边弧宽度为 0.30 – 0.50 mm，则镜片边缘的翘起高度应为：
- 0.05 mm
 - 0.10 mm
 - 0.50 mm
 - 1.00 mm
9. **Which of the following RGP lens parameters is NOT affected when altering the overall diameter of a contact lens?**
- Back optic zone radius (BOZR)
 - Axial edge lift
 - Peripheral curve width
 - Centre of gravity
9. 当改变 RGP 镜片的总直径时，下述哪个参数不受影响？
- 基弧(BOZR)
 - 轴性边缘高度
 - 周边弧宽度
 - 重心
10. **According to Holden and Mertz (1984), what should the average thickness of a 38% water daily wear contact lens theoretically be, in order to eliminate daytime oedema?**
- 0.009 mm
 - 0.023 mm
 - 0.033 mm
 - 0.046 mm
10. 根据 Holden and Mertz (1984)的研究，理论上言，要避免白天的角膜水肿，如镜片的含水量为 38%，则镜片的平均厚度为：
- 0.009 mm
 - 0.023 mm
 - 0.033 mm
 - 0.046 mm



11. According to La Hood (1988), which of the following RGP lens edge shapes would result in the MOST comfortable lens?

- a. Square profile both anterior and posterior
- b. Round profile both anterior and posterior
- c. Square profile anterior, round profile posterior
- d. Round profile anterior, square profile posterior

11. 按照 La Hood (1988)的研究, 下述哪种 RGP 镜片的边缘形态设计最舒适?

- a. 前后面方的形态
- b. 前后面圆的形态
- c. 前面为方形, 后面为圆形
- d. 前面为圆形, 后面为方形

12. All of the following are true of aspheric RGP lenses as compared to spherical RGPs, EXCEPT:

- a. Better corneal alignment is achieved
- b. More difficult to manufacture
- c. Provide better vision
- d. More difficult to verify

12. 与球面 RGP 镜片比较, 下述均为非球面形 RGP 镜片的特点, 除了:

- a. 与角膜吻合更好
- b. 更难生产
- c. 获得更好视力
- d. 更难检测

13. Which of the following factors would likely have the LEAST effect on the flexure of an RGP lens on the eye?

- a. Permeability of the lens material
- b. Lens thickness
- c. Corneal toricity
- d. Young's modulus of the lens material

13. 下述哪点导致 RGP 镜片在角膜上的翘曲的可能性最小?

- a. 镜片材料的透气性能
- b. 镜片厚度
- c. 镜片散光特性
- d. 镜片材料的 Young's 系数

14. In which of the following lens wear modalities is lens adherence MOST likely to occur?

- a. Soft lens extended wear
- b. RGP lens extended wear
- c. Soft lens daily wear
- d. RGP lens daily wear

14. 下述哪种镜片配适特性最容易导致镜片的粘连？

- a. 软镜长戴
- b. RGP 镜片长戴
- c. 软镜日戴
- d. RGP 镜片日戴

15. **Which statement regarding the Korb “lid attachment” philosophy of RGP lens fitting is NOT true?**

- a. A modified front surface edge design provides a broader contact band with the upper eyelid
- b. Typically a smaller overall diameter is used (range of 8.60 mm – 9.40 mm)
- c. A thinner lens design is used to decrease lens mass
- d. The lens is fitted steeper than usual

15. 下述哪点关于 RGP 配适的 Korb“ 眼睑附着” 法则是不正确的？

- a. 改良的前表面边缘设计增加上眼睑对镜片的接触宽度
- b. 通常使用比较小的总直径(8.60 mm – 9.40 mm)
- c. 使用较薄的镜片设计以减少镜片材料量
- d. 镜片配适比通常型要陡

16. **What is the accepted tolerance in the verification of the back optic zone diameter of a tricurve RGP lens with a medium blend between transition zones?**

- a. 0.10 mm
- b. 0.20 mm
- c. 0.30 mm
- d. 0.40 mm

16. 在评介一三弧的过渡区为中等混合程度的 RGP 镜片的后表面光学区直径，其可接受的误差为：

- a. 0.10 mm
- b. 0.20 mm
- c. 0.30 mm
- d. 0.40 mm

17. **Which of the following should ideally be done prior to RGP lens verification?**

- a. Lens hydration in distilled water for 4 – 6 hours
- b. Polishing of the lens front surface
- c. Dry storage of the lens for 8 hours
- d. Lens hydration in a soaking solution for 12 – 24 hours

17. 在 RGP 镜片评估前必须作的事是：

- a. 镜片在蒸馏水中水合 4-6 小时
- b. 镜片前表面抛光
- c. 干燥镜片贮存装置 8 小时
- d. 镜片在浸渍溶液中水合 12-24 小时

18. What is the MOST important reason for wanting a soft contact lens to show adequate movement on the eye?

- a. To increase the comfort of the lens on the eye
- b. To improve oxygen transmission through the contact lens
- c. To remove metabolic waste and debris from under the lens
- d. To ensure adequate tear mixing with each blink

18. 软镜配戴必须要有一定活动度的最主要原因是：

- a. 增加镜片配戴的舒适度
- b. 增加镜片的透氧率
- c. 排除镜片后的代谢产物和碎片
- d. 保证在每次瞬目时都有一定的泪液交换

19. An RGP lens has a mid-peripheral zone that is flatter than the cornea, and it shows excessive edge lift on the eye. Which of the following is MOST likely to occur?

- a. Corneal indentation
- b. Reduced lens movement
- c. Minimal tear exchange with the blink
- d. Poor centration

19. 一 RGP 镜片，旁周边弧比角膜平坦，镜片边缘翘起过高，则下述哪种情况最可能出现：

- a. 角膜压痕
- b. 镜片活动度降低
- c. 随瞬目每次很少的泪液交换
- d. 镜片定位差

20. Which of the following modifications to an RGP lens could NOT be made on an existing lens, and would require a new lens to be ordered?

- a. Reducing of the overall lens diameter
- b. Flattening of the peripheral curves
- c. Steepening the back optic zone radius (BOZR)
- d. Adding -0.50 DS to the lens power

20. 下述哪种 RGP 镜片的修正无法在现镜片上作，而必须要求重新订镜片？

- a. 降低镜片总直径
- b. 使周边弧更平坦
- c. 使镜片基弧更陡直
- d. 镜片屈光度增加 -0.50 D