

CASE 3 MCQ TEST QUESTIONS

The first set of questions relate to the case and discussion

Question 1: Based on the information available, which of the following is **NOT** a potential barrier to adherence for the patient outlined in the case?

- A. **Stress**
- B. Mistrust of medical professionals
- C. Forgetfulness
- D. Fear of medication side effects
- E. Cost

Question 1 correct answer: A

Question 2: Which of the following treatment plans is most appropriate for first-line treatment of a patient with early glaucoma who has indicated they will be likely to forget to take their eyedrops? (Assume that the patient has no contraindications to any listed treatment).

- A. Trabeculectomy with mitomycin C
- B. **Selective laser trabeculoplasty**
- C. Oral acetazolamide
- D. Travoprost at night
- E. Combination eye drop with timolol 0.5% and brimonidine 0.2% twice daily

Question 2 correct answer: B

Question 3: Pilocarpine is a cholinergic antagonist: True or **false**?

Question 3 correct answer: False

Question 4: Which of the following preservative free eye drops is available in New Zealand?

- A. **Bimatoprost 0.03%**
- B. Betaxolol 0.5%
- C. Brinzolamide 1%
- D. Brimonidine 0.15%
- E. Pilocarpine 0.5%

Question 4 correct answer: A

Question 5: Ganfort eye drops are a combination of which two ocular antihypertensive agents?

- A. Brimonidine 0.2% and brinzolamide 1%
- B. Dorzolamide 2% and timolol 0.5%
- C. Latanoprost 0.005% and timolol 0.5%
- D. Betaxolol 0.5% and travoprost 0.004%
- E. **Timolol 0.5% and bimatoprost 0.03%**

Question 5 correct answer: E

Question 6: A fixation losses score of 0/0 indicates a reliable Humphrey Visual Field test

True or **False**

Question 6 correct answer: False

Question 7: Which of the following is a method for improving medication adherence in glaucoma?

- A. Reminder caps
- B. Medication alerts
- C. Simplification of medication regimen
- D. Patient education
- E. **All of the above**

Question 7 correct answer: E

Question 8: Which of the following would be LEAST likely to indicate glaucoma progression?

- A. Repeatable worsening of HVF mean deviation score of 3 dB over the course of 1 year
- B. Newly observed relative afferent pupillary defect
- C. Disc haemorrhage in a region of peripapillary neuroretinal rim thinning
- D. **Increase of 4 mmHg in treated IOP**
- E. Progressive thinning of 10 microns of the inferior retinal nerve fibre layer on OCT

Question 8 correct answer: D

Question 9: Up to what percentage of patients treated for glaucoma do not take their medications as directed?

- A. 15%
- B. 28%
- C. 42%
- D. 67%
- E. **80%**

Question 9 correct answer: E

Question 10: In the study by Sleath and colleagues, what was the most-commonly reported issue in using glaucoma medications?

- A. Difficulty reading the print on the container
- B. Side effects
- C. **Eyedrops falling onto the cheeks**
- D. Having trouble squeezing the bottle
- E. Finding that too many eye drops came out at a time

Question 10 correct answer: C

Question 11: Based on the findings of Sleath and colleagues, which of the following statements is FALSE?

- A. 16% of patients reported difficulty in getting eyedrops into the eye
- B. **Increasing numbers of glaucoma medications were associated with higher reported problems**
- C. Patients with depression had lower self-reported rates of medication adherence in glaucoma
- D. Older patients were more likely to report difficulty in opening the eye drop container
- E. Optometrists and ophthalmologists should ask the patient about a history of depression

Question 11 correct answer: B

The second set of questions relate to the Article by Robin and Muir: Medication Adherence in Patients with Ocular Hypertension or Glaucoma. Please read this article before answering the questions.

Question 12: In the United States of America, approximately how many deaths per year are thought to be attributable to non-adherence to medications or treatment plans?

- A. 15,000

- B. 48,000
- C. 125,000**
- D. 270,000
- E. 1,000,000

Question 12 correct answer: C

Question 13: Which of the following is **FALSE** regarding adherence?

- A. Adherence is used to describe how well a patient takes a prescribed medication
- B. It is complicated and multifactorial, influenced by a number of factors
- C. Adherence can also encompass a patient's overall healthcare utilisation
- D. It is difficult to measure patient adherence
- E. Adherence and compliance should be used interchangeably**

Question 13 correct answer: E

Question 14: Which of the following terms is correctly matched with its definition?

- A. Adherence: describes whether a patient attends their recommended follow-up schedule
- B. Persistence: assesses whether or not a patient ceases to take the prescribed medication**
- C. Compliance: refers to how well a patient takes the prescribed medication
- D. All of the above
- E. None of the above

Question 14 correct answer: B

Question 15: Which of the following is **NOT** a dimension of adherence?

- A. Patient-related
- B. Government-related**
- C. Therapy-related
- D. Condition-related
- E. Social and Economic

Question 15 correct answer: B

Question 16: Adherence to topical glaucoma medication regimens includes:

- A. Filling and re-filling prescriptions
- B. Administer the correct dosage to the correct eye

- C. Use the eye drops at the appropriate time of day
- D. Successfully instilling the medication into the eye
- E. All of the above**

Question 16 correct answer: E

Question 17: What percentage of **non-adherent** patients identified mistrust of their glaucoma physician as an important barrier?

- A. 2%
- B. 13%
- C. 26%
- D. 31%**
- E. 44%

Question 17 correct answer: D

Question 18: Which of the following is **NOT** a possible method to improve adherence in glaucoma/OHT?

- A. Increasing the frequency of glaucoma assessments**
- B. Simpler dosing regimen
- C. Novel drug delivery systems eg. Implants or injectable therapies
- D. Improving patient education
- E. Automated patient reminders to take medication

Question 18 correct answer: A

Question 19: Which of the following negatively influences adherence in glaucoma/OHT?

- A. Physical limitations that make it difficult to administer eye drops
- B. Lack of knowledge about glaucoma/OHT and disease progression
- C. Poor health literacy
- D. Socio-economic factors
- E. All of the above**

Question 19 correct answer: E

Question 20: What percentage of **non-adherent** patients stated medication side effects to be an important barrier to adherence?

- A. 21%
- B. 34%
- C. 42%**

- D. 55%
- E. 62%

Question 20 correct answer: C

Question 21: Non-adherent glaucoma patients are more likely to reporting having difficulty with eye drop instillation than adherent patients.

True or False

Question 21 correct answer: True

Question 22: Which **four factors** are **most frequently** identified as significant barriers to adherence in non-adherent glaucoma patients?

- A. Stress, difficulty with administration, physician mistrust, forgetfulness
- B. Belief that glaucoma medications cause blindness, physician mistrust, medication cost, poor knowledge of glaucoma
- C. Difficulty with administration, stress, sceptical patient beliefs about glaucoma, medication cost
- D. Forgetfulness, poor self-efficacy, sceptical patient beliefs about glaucoma, poor patient knowledge**
- E. Side effects, stress, medication cost, poor self-efficacy

Question 22 correct answer: D

Question 23: It has been reported that 33% of patients on regular medication (not glaucoma-specific) miss doses because they run out of medication before re-filling their prescription: **True** or False?

Question 23 correct answer: TRUE

Question 24: Which of the following statements concerning adherence in patients with glaucoma is FALSE?

- A. Approximately 50% of patients with glaucoma do not visit their ophthalmologist in the 18 months following their diagnosis**
- B. 10% of glaucoma patients continuously refilled prescriptions in the first 12 months
- C. There is considerable variability in reported rates of glaucoma medication adherence due to the ways adherence are defined or measured
- D. Adhering to glaucoma treatment regimens involves four steps
- E. Poor adherence in glaucoma can include utilisation of healthcare, as well as medication use

Question 24 correct answer: A

Question 25: What is the phenomenon of 'white coat adherence'?

- A. Increase in blood pressure when measured in-office
- B. Improvement of adherence prior to a follow-up appointment, followed by a decline after the visit**
- C. Adequately controlled IOP at all patient visits with their ophthalmologist or optometrist
- D. Improvement in adherence following an eye examination
- E. None of the above

Question 25 correct answer: B