

## Recorded Lectures - Multiple Choice Answers

### Overview of Glaucoma

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Six of the following questions were presented online following a recorded lecture video to entrants to comply with the General Optical Council's best practice specification for this type of CET.

#### 1. Glaucoma affects many people in the United Kingdom. Which phrase best describes Glaucoma:

- a) Glaucoma can only be detected by tonometry
- b) Glaucoma is a group of eye diseases which damage the optic nerve
- c) Glaucoma is always an inherited eye condition
- d) Glaucoma usually presents early on in life

**b is the correct answer.** Glaucoma UK, a leading UK Glaucoma charity, state that 'Glaucoma is a group of eye diseases which damage the optic nerve'.

Detection of glaucoma involves tonometry, but it is not the only diagnostic test used. Glaucoma can be inherited, however many people with glaucoma have no relatives with the disease and whilst it is not unheard of to have glaucoma in early years, most people are diagnosed in later life. More information can be found at: <https://glaucoma.uk/about-glaucoma/what-is-glaucoma/>

#### 2. Which of the following best defines the term 'Ocular Hypertension':

- a) A person with normal IOP's but has symptoms of glaucoma
- b) A person whose visual field is compromised
- c) A person with consistently raised IOP's but no further evidence of glaucoma
- d) A person with optic nerve damage but normal IOP's

**c is the correct answer.** The College of Optometrists state: *Ocular hypertension (OHT) is generally defined as consistently elevated intraocular pressure (IOP) (greater than 21mmHg [2 standard deviations above the population mean IOP] by Goldmann applanation tonometry [GAT] on 2 or more occasions) in one or both eyes in the absence of clinical evidence of optic nerve damage, visual field defect or other pathology that could explain high IOP.* Further information can be found at: <https://www.college-optometrists.org/guidance/clinical-management-guidelines/ocular-hypertension-oht-.html>

#### 3. Which of the following is not typically a sign/symptom of 'Primary Angle Closure Glaucoma'(PACG):

- a) Ocular redness
- b) Orbital or periorbital pain which can be severe

- c) Sudden impairment of vision in one or both eyes
- d) Quiet, clear eyes with good visual acuity

**d is the correct answer.** Occasionally PACG is asymptomatic, but most presentations are associated with a sudden onset of signs and symptoms. More information can be found at:

<https://www.college-optometrists.org/guidance/clinical-management-guidelines/glaucoma-primary-angle-closure-pacg-.html>

**4. Certain sectors of society are more predisposed to developing Chronic Open Angle Glaucoma – the form glaucoma that is routinely screened for in practice. If a patient is myopic, with a prescription of more than 3 dioptres the risk of them developing glaucoma compared to an emmetrope is:**

- a) 2.46x
- b) 5x
- c) 7.34x
- d) 10x

**a is the correct answer.** The odds ratio, stated by the College of Optometrists, is 2.46; meaning that a person with myopia >3.00D is the odds of the person developing glaucoma are 2.46 x greater. Further information can be found at:

<https://www.college-optometrists.org/guidance/clinical-management-guidelines/glaucoma-primary-open-angle-poag-.html>

**5. There are numerous tests used in the detection and diagnosis of glaucoma. One test, Gonioscopy, measures:**

- a) The pressure within the eye
- b) The thickness of the cornea
- c) The anterior angle of where the iris meets the cornea
- d) The field of vision

**c is the correct answer.** Gonioscopy helps determine whether the angle where the iris meets the cornea is open and wide or narrow and closed. Further information on tests used to screen for glaucoma can be found at:

<https://www.college-optometrists.org/the-college/policy/consultation-responses/consultation-on-screening-for-glaucoma.html>

**6. Many clinicians are no longer using non-contact tonometry. The gold standard for applanation tonometry is considered to be:**

- a) I Care tonometry
- b) Perkins tonometry
- c) Tonopen tonometry
- d) Goldmann tonometry

**d is the correct answer.** All other methods are indeed applanation tonometry methods, however, Goldmann (GAT) is considered the 'Gold Standard' and is stated in the NICE guideline NG81 for diagnosis. Further information can be found at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4413589/>

**7. Many optical practices now offer patients OCT scanning. OCT is fundamentally a method of imaging different structures of the eye. OCT stands for:**

- a) Optical Coherence Tonometry
- b) Optical Coherence Tomography
- c) Ocular Coherence Tonometry
- d) Ocular Coherence Tomography

**b is the correct answer.** OCT stands for Optical Coherence Tomography. OCT performs high-resolution, cross-sectional tomographic imaging of the internal microstructure in materials and biologic systems by measuring backscattered or back reflected light. Further information can be found at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1531864/>

**8. Management of glaucoma patients varies greatly depending on several factors. Which is not an advised method of managing glaucoma patients?**

- a) Routine eye examination when the patient would normally be due
- b) Short interval monitoring – sooner than routine recall
- c) Prescribed topical medication drops
- d) Surgery by ophthalmologist

**a is the correct answer.** The NICE guidelines suggest shorter recall intervals to monitor patients who have or at risk of developing glaucoma. Further information can be found at: <https://www.nice.org.uk/guidance/ng81/chapter/Recommendations#treatment>

**9. Some glaucoma medications, such as eyedrops, can have obvious side effects. Which is not considered a side effect of glaucoma eyedrops:**

- a) Redness of the eye
- b) Changes in iris colour
- c) General improvement in visual acuity and visual fields
- d) Increase in the length of the eyelashes

**c is the correct answer.** Glaucoma is an eye disease that can only be controlled and not reversed. More information on side effects can be found on the Glaucoma UK Charity website here: <https://glaucoma.uk/about-glaucoma/treatments-surgery/eye-drops/>