

Learning Outcomes for the College of Optometrists' Professional Certificate in Glaucoma

Programme to prepare optometrists to participate in formal referral refinement schemes for chronic open angle glaucoma (COAG) and ocular hypertension (OHT) and also monitor patients with diagnosed OHT and suspect COAG who have an established management plan (Certificate Level)

1. Aim

The training programme is designed to prepare optometrists to participate in formal 'referral refinement' and OHT/ suspect COAG monitoring schemes. It is intended to ensure the currency of core competencies (including those required for pathways involving 'repeat measures') and provide additional specialist knowledge and skills for monitoring patients with diagnosed OHT and suspect COAG with an established management plan

2. Learning outcomes

Following completion of the programme, an optometrist should be able to demonstrate:

[a] an ability to take a comprehensive ophthalmic history in a patient with diagnosed OHT or suspect COAG

[b] an awareness of demographic, ocular and systemic risk factors for COAG

[c] an ability to accurately measure IOP using a slit-lamp mounted Goldmann applanation tonometer and to interpret the results

[d] an ability to perform an assessment of central corneal thickness using appropriate instrumentation and to interpret the significance of the results

[e] an ability to assess the optic nerve head by non-contact slit-lamp binocular indirect ophthalmoscopy and to detect the characteristic features of glaucomatous optic neuropathy

[f] an awareness of the risk factors for angle closure and an ability to perform and interpret the results of the van Herick test for the assessment of anterior chamber depth

[g] an ability to recognise the signs and symptoms of a patient suffering from acute angle-closure and refer the condition appropriately

[h] an understanding of the use of perimetric tests for the assessment of a patient

at risk of COAG and an ability to choose the most appropriate test strategies, be familiar with their limitations, understand the sources of error, correctly interpret results and recognise glaucomatous field loss

[i] an ability to differentiate COAG from other ocular and central visual pathway anomalies

[j] an ability to make appropriate clinical decisions relating to OHT and COAG diagnosis and management

[k] an awareness of timescales for follow-up of patients with diagnosed OHT and suspect OHT

[I] an ability to detect change in clinical status in patients with diagnosed OHT and suspect COAG (e.g. change in visual fields or optic nerve head)

[m] an ability to inform patients/public about glaucoma, its detection, prognosis and management and provide them with relevant and accessible information and advice at initial and subsequent visits

[n] A knowledge of national guidance around referrals for patients with OHT, COAG or suspect COAG.

3. Indicative content

- (a) The glaucomas
 - Terminology
 - Classification
 - Clinical features
- (b) Epidemiology and risk factors for glaucoma
- (c) Examination of the anterior segment
 - Van Herick technique
 - Ocular features of conditions that predispose to glaucoma (e.g. pigment dispersion, pseudoexfoliation)

(d) Pachymetry

- Calibration
- Technique
- Sources of error
- Interpretation of results
- Infection control
- (e) Tonometry
 - Instrumentation
 - Calibration
 - Technique
 - Sources of error
 - Short-term fluctuations
 - Infection control
- (f) Visual fields
 - Instrumentation
 - Test strategies
 - Sources of error
 - Interpretation of results
 - Structure: function relationships

(g) Examination and evaluation of the optic nerve head and retinal nerve fibre layer in glaucoma

- Non-contact slit-lamp binocular indirect ophthalmoscopy
- Normal optic nerve head
- Features of glaucomatous optic neuropathy
- (h) Differential diagnosis of glaucoma and influence of co-morbidity
- (i) Monitoring and clinical status change detection
- (j) Sources of patient information and decision support
- (k) Professional and national guidance relating to COAG and OHT
- (I) Clinical governance for referral refinement and OHT/suspect monitoring

4. Teaching, Learning and Assessment Strategies

The programme should be of sufficient length to achieve the stated learning outcomes. Programme delivery may be achieved through a variety of learning strategies e.g. face-to-face instruction, distance learning or directed private study. However, these must be appropriate for the material or skill being taught. Assessments should be designed to provide valid and reliable judgements about a trainee's performance. Assessment criteria must be made explicit and be appropriate for the competency they are designed to test. For example, competencies relating to a clinical skill should be assessed using an appropriate skills-based assessment. For each assessment, a marking scheme with the appropriate pass/fail criteria should be established.

Definitions

'Referral refinement' is a term specific to glaucoma management that describes a two-tier assessment in which initial evidence of abnormality during case-finding assessment or screening is validated by a subsequent enhanced assessment which adds value beyond that achieved through a simple 'repeat measures' scheme. A referral refinement service involves the undertaking of tests sufficient for diagnosis of OHT and suspected COAG and the interpretation of these clinical findings, with specialist practitioners who are delivering this service independently.¹

'Repeat measures' is a term specific to glaucoma that primarily describes the repeated measurement of eye pressures, but may also include repeated measurement of visual fields and other relevant ocular parameters when clinically necessary.

¹NICE Quality Standards (2011) Glaucoma; Referral 1