THE COLLEGE OF OPTOMETRISTS

Professional Excellence in Eye Health

NICE Guideline
Glaucoma: diagnosis and management (update)

A briefing for members of the College of Optometrists

The revised NICE Guideline Glaucoma: diagnosis and management came into effect on 1 November 2017. For our Scottish members, the Scottish Intercollegiate Guidelines Network (SIGN) Glaucoma Referral and Safe Discharge guideline is in effect.

Background

The National Institute for Health and Care Excellence (NICE) provides national guidance, advice and standards to improve health and social care services. NICE was originally set up in 1999 to reduce variation in the availability and quality of NHS treatments and care. In April 2013, it was established in primary legislation as set out in the Health and Social Care Act 2012, which expanded its remit to cover social care as well as health.

The statutory footing NICE established at this time means that its guidelines officially apply only to England. However, there are agreements to provide certain products and services to Wales, Scotland and Northern Ireland.

NICE uses a committee structure of specialists and patient representatives supported by a professional team of information scientists, statisticians, health economists and methodologists to evaluate and consider all available evidence, both clinical and financial, to make the most informed recommendations possible. It consults with stakeholders through the process and is clear about when and how it uses the evidence presented.

Around 10% of those registered as blind in the UK have glaucoma. 2% of people older than 40 have chronic open-angle glaucoma (COAG), rising to just under 10% in people over the age of 70. COAG is often asymptomatic which can result in up to 90% of optic nerve fibres being irreparably damaged by the time the disease is detected. Early diagnosis and treatment of people with glaucoma is crucial to avoiding blindness. This fact is an important driver for the update to the guidelines, with a focus on accurate and timely referrals.

What are the key points?

The revised Guideline has been extended to cover referral and case finding. For most optometrists, the guidance on referral is the most relevant. Where you have a local community service such as repeat measures or enhanced case finding, your first step should be to refer your patient there so that they can do more tests to check accuracy. However, if you are working in case finding or other referral filtering schemes, or as a specialist optometrist in glaucoma, more of the recommendations will affect you.

How will this affect you in daily practice?

Referral
NICE is clear that you should not refer solely on IOP measurement using non-contact tonometry, and where elevated pressure of 24 mmHg or above is the only finding (normal disc and field) then a Goldmann-type pressure should be measured prior to any hospital eye service referral. People with IOP below 24mmHg should be advised to continue with their routine eye examinations.

In addition, you should not refer people who have been discharged from the Hospital Eye Service after an assessment for COAG and related conditions unless clinical circumstances have changed, and a new referral is fully justified.

NICE recommends that accuracy of test results should be checked before referral for diagnosis of COAG or ocular hypertension (OHT), depending on local arrangements - for example, via referral filtering services such as repeat measures, enhanced case finding or referral refinement.

If you are doing sight testing under GOS (without a referral filtering service in place)
When you are concerned about a patient who is having a routine eye examination because you have discovered that there is:

- optic nerve head damage, or
- a visual field defect consistent with glaucoma, or
- IOP is **24 mmHg or above** (note that the threshold has changed from >21 mmHg)

then, depending on clinical circumstances, you should refer the patient to the hospital eye services for a diagnosis either routinely or, if necessary, urgently via their GP, or else directly if considered an emergency.

If you work in a referral filtering service
Referral filtering services include repeat measures, enhanced case finding and referral refinement. Which level of referral filtering service you are involved with will depend on local arrangements.

NICE recommends, before referral for further investigation and diagnosis of COAG and related conditions, people should be offered all the following tests:

- central visual field assessment using standard automated perimetry (full threshold or supra-threshold)
- optic nerve assessment and fundus examination using stereoscopic slit lamp biomicroscopy (with pupil dilatation if necessary), and optical coherence tomography (OCT) or optic nerve head image if available
- IOP measurement using Goldmann-type applanation tonometry
- peripheral anterior chamber configuration and depth assessments using gonioscopy or, if not available or patient prefers, the van Herick test or OCT.

NB: If you are involved in a referral refinement service you should hold a suitable qualification and have the necessary experience to make a diagnosis of OHT and suspected glaucoma, and to carry out gonioscopy to exclude angle closure. See the Royal College of Ophthalmologists' *Glaucoma Commissioning Guide* for more information.

Organisation of care
People with suspected optic nerve damage or repeatable visual field defect, or both, should be referred to a consultant ophthalmologist for consideration of a definitive diagnosis and formulation of a management plan. However, if you have a specialist qualification and relevant experience you can diagnose OHT and suspected COAG and formulate a management plan for these conditions.

A comprehensive list of equipment and information sharing requirements, as well as process requirements, is set out in the guideline recommendations.

Please be aware that holding an independent or non-medical prescribing qualification alone is insufficient for managing glaucoma and related conditions. A specialist qualification relevant to the case complexity of glaucoma is also required.

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Providing information
Depending on your role, you should offer people the opportunity to discuss their diagnosis, referral, prognosis, treatment and discharge, and provide them with relevant information in an accessible format at initial and subsequent visits. There is a list of useful information in the recommendations.

More information

College of Optometrists *Guidance for professional practice:* www.college-optometrists.org/guidance
Royal College of Ophthalmologists, *Glaucoma Commissioning Guide:* www.rcophth.ac.uk/wp-content/uploads/2016/06/Glaucoma-Commissioning-Guide-Long-June-2016-Final.pdf

Disclaimer

This is the College's interpretation of the NICE guidelines.