

Association of Ophthalmologists' response to NICE Clinical Guideline 85

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Glaucoma is a leading cause of visual impairment in the UK, and the Association of Ophthalmologists (AOO) welcomes National Institute for Clinical Excellence (NICE) Clinical Guideline 85, on the diagnosis and management of chronic open angle glaucoma (COAG) and ocular hypertension (OHT). We know from our collective experience that the way in which glaucoma patients are managed varies widely between different hospitals and consultants, and we welcome the provision of a national framework for the diagnosis and management of these patients.

Although the NICE Guideline has been cited in a large number of unnecessary referrals to UK hospital eye departments in 2009, both NICE¹ and the Royal College of Ophthalmologists² have released statements clarifying that these represented misinterpretations of the NICE Guideline, which was not intended to define referral criteria from the community.³ Recently the College of Optometrists and the Royal College of Ophthalmologists jointly issued further guidance on this issue, emphasising the greater accuracy of applanation tonometry and the importance of averaging several measurements if using non-contact tonometry.⁴

Regarding the NICE Guideline itself, we note in particular the following Key Priorities for Implementation (KPIs):

1. At diagnosis of OHT or COAG, all patients should receive:
 - a. Corneal pachymetry
 - b. Gonioscopy
 - c. Optic nerve head assessment +/- imaging.
2. At follow-up visits, the following should all be available to the clinician:
 - a. Previous notes and tests
 - b. Previous images.

In addition, we note the public information document which details to patients the tests which they should receive. We agree with the importance of the above-mentioned Key Priorities for Implementation for diagnosis and monitoring of these conditions, and we feel

that a service which is able to achieve these KPIs will better serve our patients with OHT or suspected or actual COAG.

However, we are concerned that the NHS will not be able to meet these KPIs without a substantial increase in funding to hospital eye departments. We have all experienced overbooked clinics reducing time available with each patient, poor access to equipment such as pachymeters and gonioscopes (especially in outreach or community clinics), poor access to previous optic nerve images in clinic (either in hospital notes or on networked computers next to doctors' slit-lamps, where they exist), and frequent outpatient visits where the patient's clinic notes are missing. Thus, the standard of care set out in the Guideline cannot be achieved without a large increase in investment to eye clinics. We set out here some more details on areas of particular concern.

1. Gonioscopy

A. Gonioscopes quality and availability

It is generally acknowledged that gonioscopy is under-performed, and this has also been found in the United States where, in a rare study published on this topic, almost 50% of patients with COAG failed to receive this assessment at presentation.⁵ Clearly, if all UK patients referred to busy NHS clinics with OHT or possible COAG are now to receive this test, then each doctor in eye clinic needs instant access to a gonioscope, rather than having to go and search around the clinic for one. Based on our collective experiences, this will require a large increase in the number of gonioscopes available in NHS eye clinics. Furthermore, we are aware of eye units which do not possess indenting gonioscopes, without which doctors assessing closed iridocorneal angles may find it more difficult to differentiate between appositional and synechial angle closure. Provision of gonioscopes in adequate numbers will be mandatory if NHS eye departments are realistically expected to follow this aspect of the Guideline. NHS eye units have historically relied on doctors buying their own fundus lenses for posterior segment examination, but in its guidance on ophthalmic instrument

decontamination, the Royal College of Ophthalmologists has stated that 'diagnostic contact lenses should not be moved between clinics and departments'.⁶ Each eye department should therefore purchase and maintain their own set of gonioscopes.

B. Provision of care as it relates to gonioscopy

The Guidelines rightly suggest that patients with OHT and suspected or actual COAG will be looked after by a variety of health care professionals, both in the community and, where relevant, in a hospital eye clinic. But the Guidelines state further that "diagnosis [of OHT or COAG] by health care professionals other than ophthalmologists could be cost-saving" (section 10.3.5). Given that diagnosis requires performing and interpreting the large range of tests mentioned in the Guideline, the implication is that those tests would also be performed and interpreted by health care professionals other than ophthalmologists, in the interests of cost-saving.

The emphasis on gonioscopy is clearly aimed at detecting angle closure, and the Guideline refers frequently to gonioscopy being used to check that the angle is open. We appreciate that the Guideline itself concerns primary open angle glaucoma rather than secondary glaucomas. But in patients with raised intraocular pressure or glaucomatous optic nerve damage, assessment of the iridocorneal angle should absolutely not be limited to deciding whether or not the angle is open.

In the hypertensive eye, pathologies such as angle recession in eyes with previous trauma, trabecular hyperpigmentation in eyes with pigment dispersion, angle neovascularisation in eyes with previous retinal vein occlusions, or Sampaolesi lines in eyes with pseudoexfoliation are all important gonioscopic signs which add to the clinical picture and further inform diagnosis. Familiarity with these and other important, but not necessarily common gonioscopic signs has traditionally been acquired by ophthalmologists over several years of training in both emergency and outpatient hospital eye services. Importantly, some of

the above-mentioned gonioscopic experience is gained through the management of patients whose primary presentation was unrelated to raised intraocular pressures (for example, noting angle recession when assessing ocular trauma in eye casualty), and who therefore are likely to have been seen primarily by ophthalmologists. At present, hospital-trained ophthalmologists have a training structure which allows the accrual of just about enough experience in gonioscopy to safely reach diagnostic decisions in such patients. Currently, other health care professionals are not provided with the same degree of exposure to gonioscopic pathologies, by virtue of the large differences in location, length, and emphasis of the training programme. Consequently, we feel that diagnostic decisions involving gonioscopy should generally remain the responsibility of hospital-trained ophthalmologists.

2. Optic nerve head imaging

Many optic nerve imaging modalities have been developed in recent years, and continue to evolve rapidly in design and performance. Meanwhile, the technology of optic nerve photography has been here for decades, and will continue to be so. Where previous optic nerve photographs or other images exist, doctors should be able to bring them up on a computer next to their slit-lamp. This facilitates comparison with more recent images, allows the patient to see and understand changes in their own optic nerve, and removes the need for paper print-outs of every image captured. We believe that few NHS eye clinics currently have computers by each slit-lamp which are networked to the clinic's image database so that doctors can easily view previous optic nerve images. Furthermore, new imaging technologies such as optical coherence tomography (OCT) are showing promise in detecting subtle glaucomatous changes of optic disc and nerve fibre layer. If early signs of efficacy are later corroborated, then investment in such technologies may be beneficial not just for the individual, but for the community of patients (for example, by informing decisions on follow-up frequency).

References

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3. Outreach clinics

Many NHS eye units run clinics in community hospitals, in order to prevent excessive patient travel. Where new patient referrals are accepted to such clinics, it is important that they are properly equipped with facilities for optic nerve imaging, gonioscopy, and corneal pachymetry. Currently, this may not be the case for all outreach clinics.

4. Availability of previous notes, test results (e.g. perimetry) and images

According to recent estimates, some 1.2 million patients are seen annually in the UK without their notes; the National Patient Safety Agency received almost 40,000 incident reports in 2007 regarding inadequacy of hospital notes.⁷ Unfortunately, many NHS Trusts now encompass several sites or hospitals, and appear to have difficulty in arranging for all notes to be available to doctors seeing patients in clinic across different sites. This is clearly a long-standing problem, and inherent with paper notes. Following years of delay and uncertain efficacy of specialist clinic implementation, eye doctors and eye departments are not expecting the national NHS IT project to deliver a decent outpatient ophthalmic record system. But many eye departments have until recently been told they cannot purchase third party patient record software because of pending national IT programme changes. Unless hospital eye units are now given permission and funding to invest in some of the many dedicated ophthalmic electronic patient record systems on the market, the service's ability to follow those parts of the Guideline dealing with monitoring and follow-up will be severely compromised owing to the frequent absence of hospital notes.

Summary

The AOO commends NICE on setting out standards of best practice in this area in Guideline 85. Glaucoma is an optic nerve pathology whose differential diagnosis can potentially include other, sometimes life-threatening, causes of cranial neuropathies. We therefore feel it is in the best interests of our patients that medically-trained ophthalmologists continue to be responsible

for the initial diagnosis and classification of their condition, and the formulation of a management plan specific to their case. We welcome the fact that cost-effective solutions to the delivery of such management plans will involve non-ophthalmological health care professionals, and look forward to reviewing schemes which can deliver care to the standards set out in the Guideline. There now needs to be a commitment for appropriate investment in infrastructure and equipment across NHS hospital eye clinics and their community clinic counterparts. Particularly where equipment provision is concerned, we call on the government to provide this extra funding without delay, in order to expedite adoption of these guidelines and minimise the impact on the lives of our patients with OHT or suspected or actual glaucoma. **EN**

The AOO is an independent, non-profit organisation which aims to provide ophthalmologists with a strong, professional voice in order to guide the development of public policy for ophthalmic care in the UK, for the benefit of both patients and the profession. Membership is free for ophthalmologists.
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Take home message

1. The NICE guideline provides an important framework and reference point for the diagnosis and management of OHT and COAG.
2. More expenditure on diagnostic equipment and IT infrastructure is needed before NHS eye services can adopt the guideline's recommendations.
3. Given current training structures, diagnostic decisions involving gonioscopy should remain the responsibility of ophthalmologists.
4. Doctors should continue to be responsible for initial diagnosis and classification of glaucoma, because the differential diagnosis may include other neurological and systemic pathologies.
5. Cost-effective delivery of care for glaucoma patients is likely to involve a variety of health care professionals.

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