THE COLLEGE OF OPTOMETRISTS

Guidance on the referral of Glaucoma suspects by community optometrists

Issued by The College of Optometrists and The Royal College of Ophthalmologists

Introduction and general guidance

1. This guidance relates to asymptomatic patients. Those with symptoms should be treated according to current protocols.

2. This guidance relates to suspected glaucoma only. Patients suspected of having other previously undiagnosed conditions should be referred as appropriate.

3. It is for the practitioner to satisfy him/herself that procedures are included or excluded according to the patient's clinical need (ref 1, ref 2). If practitioners find during the Eye Examination that a patient records an intraocular pressure (IOP) of >21mmHg and/or suspicious optic discs, central visual field assessment may provide useful diagnostic information.

4. When referring a patient on IOP grounds alone, Goldmann applanation tonometry (or Perkins tonometry) is regarded as offering greater accuracy.

5. Patients should be referred if the optometrist identifies one or more of the following:

    a. There are optic disc signs consistent with glaucoma in either eye.
    b. The IOP in either eye exceeds 21mmHg (note referral in specific scenarios below).
    c. A visual field defect consistent with glaucoma is detected in either eye.
    d. A narrow anterior drainage angle on van Herick testing consistent with a significant risk of acute angle closure within the foreseeable future (refs 3 and 4).
    e. Signs often associated with glaucoma (e.g. pigment dispersion or pseudoexfoliation).

6. When practitioners consider it necessary to refer the patient, they should provide as much factual information derived from the eye examination as possible to the ophthalmologist to whom they are referring the patient. For optic disc assessment, practitioners should state whether the disc appears normal or abnormal, and if it appears abnormal, why this is so. Where practitioners have determined that it is clinically necessary to perform a visual field assessment as part of particular eye examination, a copy of the visual field assessment should also be provided.

Procedure for using Non-contact Tonometers

7. The referring optometrist is responsible for ensuring that the measurement process has been appropriately performed (ref 5).

8. Practitioners should ensure the patient is prepared for the procedure. For example, they should instruct patients to loosen neck ties and not to hold their breath.

9. Practitioners should take **four** readings per eye and use the **mean** as the result. Only when the **mean** result is > 21 mmHg should the practitioner consider referring the patient for further assessment if this is the only abnormality found. Reducing the number of readings per eye increases the chance of recording a mean result of >21mmHg in eyes of normal persons with Goldmann IOPs of <21mmHg (ref 6).

10. If a patient has not been subject to non-contact tonometry before, practitioners should undertake four readings per eye as usual from both eyes. If the mean result is >21mmHg for either eye, a new set of readings should be taken for the eye, or eyes, for which this is the case. This is because research in normal eyes shows that the mean of subsequent sets of four readings will often be within the normal range (ref 7).

Non-referral in specific scenarios

11. Practitioners may consider not referring patients at low risk of significant visual field loss in their lifetime -

    a. Patients aged 80 years and over with measured IOPs <26mmHg with otherwise normal ocular examinations (normal discs, fields and van Herick).

    b. Patients aged 65 and over with IOPs of <25mmHg and with otherwise normal ocular examinations (normal discs, fields and van Herick).

    These groups do not qualify for treatment under current NICE guidance. Such patients may be advised that they should be reviewed by a community optometrist every 12 months.

    Note :- the IOP cut offs above are considered by the development group to reflect safe practice in the knowledge that they are below the IOP cut-offs advised by NICE for treatment of ocular hypertension in view of the variability of measured IOPs in this range.

References

1 College of Optometrists, Code of Ethics and Guidelines for Professional Conduct, Section B2: The Routine Eye Examination

2 College of Optometrists, Code of Ethics and Guidelines for Professional Conduct, Section D3 Examining patients at risk from glaucoma

3 www.gonioscopy.org/**vanHerick**.html

4 http://www.zeiss.de/C125679E00525939/EmbedTitelIntern/Van_Herick_en/$File/Van_Herick_en.pdf

5 College of Optometrists, Code of Ethics and Guidelines for Professional Conduct, Section A6: Delegation

6 Vernon SA D J Henry S J Jones L Cater, Maximising the sensitivity and specificity of non-contact tonometry in glaucoma screening, Eye 1991 - 5 491-3.

7 Vernon SA, Reproducibility with the Keeler Pulsair 2000 noncontact tonometer, Br. J. Ophthalmol. 1995 79 544-7

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