19th February 2010

PRESS RELEASE

RAISING THE STANDARD OF PRIMARY EYE EXAMS IN EUROPE

The European body representing optometrists and opticians has today published the attached guide to eye exams by optometrists. It explains what the contents of a primary eye examination would normally be, depending on the patient’s clinical circumstances and the national regulatory framework within which the optometrist practises his or her profession.

The guide, in the form of a ‘position paper’ by three distinguished practitioners, shows the extent to which the trained optometrist can determine a patient’s need for corrective eyewear (glasses or contact lenses) and make a preliminary assessment of the patient’s eyes.

In some countries of Europe (a decreasing number) primary eye exams may only be conducted legally by medically qualified persons, usually ophthalmologists. But in many other countries primary eye exams are now conducted increasingly by optometrists, a university-trained profession. Generally speaking, if a patient’s eyes appear to the optometrist to have any disease, injury or abnormality, the patient will be referred by the optometrist for a medical examination.

The position paper, commissioned by ECOO (the European Council of Optometry and Optics (ECOO), was written by Holger Dietze, Richard Llewellyn and Mireia Pacheco-Cutillas, three authors representing the forefront of practising and academic optometry in Europe today.

ECOO groups together the optometric and optical organisations representing 75,000 practitioners from 30 countries of Europe.

For further information contact:

David Craig   davidcraig@aop.org.uk
Richard Carswell  richardcarswell@aop.org.uk
CONTENTS OF AN OPTOMETRIC EYE EXAMINATION
ECOO Position paper by Dietze, Pacheco-Cutillas, Llewellyn

Holger Dietze, Ph.D., MSc.; EurOptom
Beuth Hochschule für Technik Berlin
(University of Applied Sciences)
Department of Optometry
10785 Berlin, Germany

Mireia Pacheco-Cutillas, DOO, MSc, Ph.D.
Dept. Optica i Optometria
Universitat Politècnica de Catalunya (UPC) Violinista Vellsolà 37 - TR8
08222 - Terrassa, Spain

Richard Llewellyn BSc FCOptom DOorth
Turners Optometrists
Aspen House
67 Wembdon Road
Bridgwater
Somerset TA6 7DR
England

Introduction

The purpose of this paper is to describe the procedures required to perform a comprehensive optometric eye examination. It does not, however, require all the listed procedures to be performed and additional procedures may be indicated in some cases. Each eye examination should be conducted according to the patient’s clinical condition and according to the professional judgement of the practitioner performing the eye examination.

Dependent upon the patient's symptoms and condition, it is the optometrist's responsibility to select the appropriate variety and sequence of tests that will best enable a safe and efficient examination. In some countries of the European Union however, legal reasons might prevent optometrists from undertaking all of these tests. In these cases, optometrist are required to refer the patient for further investigation and possible treatment to a medical doctor, for example, an ophthalmologist.
Initial Questioning
- Reason for Visit
- Symptoms
- Case History

Preliminary Tests

Refraction
- Objective and Subjective

Examination of Eyes and Surrounding Tissue
- Adnexa, Lids and Orbit, Anterior Eye, Posterior Eye

Supplementary Tests
- As required

Decision Making
- Clinical Outcome, Discussion, Disposal, Advice, Dispensing, Further Investigation / Treatment

ECOO
Contents of an Optometric Eye Examination
See colour coded sections in following document for addition details
During the course of a comprehensive eye examination, and having decided which tests are appropriate, an optometrist will:

- Identify the specific problems that the patient is experiencing
- Establish the visual needs of the patient pertinent to their lifestyle
- Elicit details of the patient’s personal and family history and health and medication relevant to the examination
- Differentiate between optical, pathological and age related causes for visual problems
- Explain any ocular signs and symptoms in relation to existing or potential eye diseases, general diseases and to any medication taken for ocular or general diseases
- Have full knowledge of the legal framework applying in the country within which the eye examination is being undertaken and conduct all procedures accordingly
- Keep complete and accurate records of the consultation and the outcomes
- Communicate with the patient in a manner appropriate to their ability

In order to achieve these goals the optometrist will:

1. Conduct a series of preliminary tests that will measure or check for:

   - Anatomical asymmetries or anomalies
   - Uncorrected visual acuity and visual acuity with current vision aid – in a manner appropriate to the patients ability / needs
   - Pupil reactions (pupil response in direct and indirect illumination; swinging flash light test)
   - Ocular Motility (eye alignment in nine positions of gaze)
   - Oculomotor balance – usually by cover test with and without present correction if appropriate
   - Near point of convergence
   - An assessment of the integrity of the visual field - confrontation

2. Examine the patient (using appropriate diagnostic drugs where allowed and appropriate) to establish:

   - An objective assessment of the refractive error
   - A subjective examination of the refractive error for each eye and binocularly where appropriate
   - The level of accommodation and/or near addition
   - The corrected visual acuities at distance and near for each eye and binocularly where appropriate
   - The oculomotor balance with correction at relevant distances (cover test)
   - The level of binocular integration at relevant distances (sensory fusion, stereopsis etc)
3. Examine the eyes and adnexa (using appropriate diagnostic drugs where allowed and appropriate) to establish the integrity and function of:

- The eyelids and surrounding tissue
- Slit lamp examination of the anterior eye / anterior segment, iris, lens and anterior vitreous
- Ophthalmoscopic examination of the posterior vitreous, optic nerve head and posterior segment (DO, MIO, BIO, 90D, Fundus photography)

4. Conduct a series of additional tests as appropriate to the patient’s needs from:

- Binocular visual function assessment (phoria, fusional reserves, vergence and accommodative facility, positive and negative relative accommodation etc)
- Ophthalmoscopic examination of the fundus periphery (MIO, BIO, 90D, Goldmann-Three Mirror-Lens)
- Fundus photography
- Colour vision
- Contrast sensitivity
- Keratometry / topography
- Tonometry
- Perimetry / central visual field function
- Gonioscopy
- Anterior / posterior photography
- Optical coherence tomography
- Ultrasound examination
- Retinal adaptation function
- Binocular motor field assessment
- Ophthalmodynamometry
- Exophthalmometry
- Blood pressure tests
- Additional test as required and as appropriate
At the end of the examinations, the optometrist will:

- Discuss the best way of correcting any refractive error, solving any visual problems or meeting the patients visual needs.
- Consider the differential diagnosis and decide on the options for treatment
- Explain and discuss the results of the tests and diagnosis with the patient in an appropriate manner
- Advise the patient on how their needs will best be met
- Explain any treatment, guidance, or follow up routine that may be necessary
- Offer written information or reports as necessary
- Refer the patient to the appropriate practitioner when necessary / give reasons for referral in writing

This will include advice on suitable:
- Spectacle frames
- Appropriate lens types and material
- Contact lenses of all types
- Binocular vision treatment programmes
- Low vision aids including magnifiers and CCTV devices
- Other necessary treatments including laser and other refractive therapies