CORRESPONDENCE

Visual limitations assessment in patients with glaucoma

EDITOR,—It is well known that patients with glaucoma develop defects in their field of vision. It is generally assumed that these defects interfere with the affected individual’s visual function. This study explored the relation between visual field loss and the perception of visual disabilities in patients with glaucoma.

A questionnaire designed to identify vision associated limitations in daily activities (VALDA, Table 1) was applied to 231 patients with glaucoma who had reliable computerised visual field examination with the Humphrey 24-2 program.1 Visual field loss was quantitatively evaluated ("mean deviation" (MD) of glaucomatous visual field deviation) (PSD). The relation between the presence of VALDA and visual field defects, visual acuity, and age was investigated.

There were 91 (39.4%) males and 140 (60.6%) females. The ages ranged from 13–90 years, with a mean age of 68.5 (SD 12.6) years. Most patients were white (n=213, 92.2%) and 18 (7.7%) were black. The mean duration since the diagnosis of glaucoma was 8.7 (SD 8.1) years (range 1–40). Ninety eight subjects (42%) reported a subjective perception of vision associated limitations in daily activities. Among the limitations mentioned by the patients, problems with night driving ranked first (97%) followed by difficulties reading newspapers (33%), and driving at any time (27%); limitations doing outdoor activities were present in 10%. The perception of VALDA was related to visual acuity and was significantly greater in older patients.

We analysed in patients with visual acuity better than or equal to 20/40 in both eyes (127 patients) the relation between the visual field deviation and the VALDA score (Table 2). The perception of VALDA was related to the MD loss in both eyes, but not to the PSD.

COMMENT

Monocular visual field examinations are frequently used clinically in monitoring glaucoma, but, from a functional viewpoint, binocular visual fields or combined monocular visual fields would be more helpful in evaluating visual function. Esterman proposed a binocular scoring system in automated perimetry.2 However, to perform Esterman’s binocular scoring system in automated perimeters is still under clinical investigation.3 Bernth-Petersen was the first to point out that some patients with cataracts have good visual function in spite of poor visual acuity.4 Because of this, he suggested that the performance of everyday tasks that are dependent on vision must be assessed in evaluations of visual function.5,6 It is the experience of most ophthalmologists that problems resulting from visual field loss contribute to those caused by reduced visual acuity. Thus, a global assessment of visual limitations may provide information about a patient’s well-being, complementing the visual acuity or visual field data. Evaluation of visual function and quality of life in patients with ocular diseases has been done with several questionnaires.7,8

In glaucoma patients Parrish and Gutierrez et al found that vision targeted questionnaires were more sensitive than generic health related quality of life measure to visual field damage.9

In this study, we found that the perception of limitation in daily activities is closely related to a general loss of visual field (MD loss) in both eyes. Although visual acuity played an important role in vision (that is, VALDA), we found that, even with good visual acuity in both eyes, patients with high MD loss in both eyes reported a high rate of limitations in daily life. Our finding that few patients with bilateral normal visual fields reported VALDA (2.7%) demonstrates that patients rarely have remarkable functional disabilities before the appearance of detectable visual field damage.

In conclusion, a questionnaire regarding vision associated limitations in daily activities provides information about patients’ well-being. Visual limitations, as measured in this study, appear to be related to the total amount of visual field loss. Some patients with visual field loss do not have any limitation in visual function.

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BOOK REVIEW


In the preface of this book, the aim of promoting the safe use of contact lenses is stated. The text complements this by reasoned use of the scientific literature, and addresses the philosophical nature of the way to advise the modern lens wearer in the balance between ease of use, safety to the cornea, and reliability of the lens in the less than perfect hands of the wearer, and it attempts to define a paradigm for lens wear for the future with current available lens materials.

Divided into two sections, the shorter Section I concentrates on the essential and relevant anatomy and physiology of the cornea and preconical tear film. There is also a good introductory chapter on corneal topography. Each chapter is concise, clearly set out, and well illustrated and there is reference to and presentation of experimental evidence for the information provided. It provides an excellent introduction to the second section. Section II concentrates on the development of the concept of disposable contact lens. The opening chapter is long, but very readable as it traces the evolution of the contact lens, from original glass to modern materials, and manufacturing methods with some perspective on the commercial decisions behind the lens designs. There is a summary appendix defining the milestones for the reader who may not be familiar with the commercial decisions behind the lens.

The other chapters address the modern demands of contact lens design, patient preferences, safety, and complications. In an
Ophthalmological Clinic, University of Creteil
The 3rd international symposium will be held on 21 November 1998 at the Ophthalmological Clinic, University of Creteil. Further details: Professor G Soubrane, Chef de Service, Clinique Ophthalmologique Universitaire de Creteil, Centre Hospitalier Intercommunal, 40 Avenue de Verdun, 94010 Creteil, France. Fax: 01 45 17 52 27.

VIIth International Symposium on Graves' Ophthalmopathy
The VIIth International Symposium on Graves' Ophthalmopathy will be held on 27–28 November 1998 in Amsterdam. Further details: Amsterdam Thyroid Club, Department of Endocrinology, F-5-171, Academisch Medisch Centrum, Meibergdreef 9, 1105 AZ Amsterdam, Netherlands.

Hong Kong Ophthalmological Symposium 98
The Hong Kong Ophthalmological Symposium 98 on myopia will be held on 28–29 November 1998 at the Hong Kong Convention and Exhibition Centre. Further details: Dr. Won-ming Chan, Secretary, Organising Committee, Hong Kong Ophthalmological Symposium 98, Hong Kong Eye Hospital, 3/F, Hong Kong Eye Hospital, 147K Argyle Street, Kowloon. (Tel: (852) 2761 9128; fax: (852) 2715 0089; email: cohk@netvigator.com)

Singapore National Eye Centre
The 3rd SNEC international meeting and 11th international meeting on cataract, implant, microsurgery and refractive keratoplasty (ICIMRK) will be held at the Shangri-La Hotel, Singapore on 28–30 November 1998. Further details: Organising Secretariat, 3rd SNEC International Meeting and 11th ICIMRK, Singapore National Eye Centre Pte Ltd, 11 Third Hospital Avenue, Singapore 168751. (Tel: (65) 2277-255; fax: (65) 2277-290/1)

Office of Continuing Medical Education
The 11th Annual Wilmer Institute's Current Concepts in Ophthalmology will be held on 10–12 December 1998 at the Johns Hopkins Medical Institutes. Further details: Program Coordinator, Johns Hopkins Medical Institutions, Office of Continuing Medical Education, Turner 20/20 Rutland Avenue, Baltimore, MD 21205, USA. (Tel: (410) 955-2959; fax: (410) 614-8613; email: cmenet@som.adm.jhu.edu)

American Academy of Optometry—Academy '98
The American Academy of Optometry, Academy '98 will be held on 10–14 December 1998 at the San Francisco Hilton and Towers, San Francisco, California, USA. The call for abstracts may be requested at (301) 984-1441 or meetings@aaoptom.org or on the web site www.aaopt.org

7th Rotterdam International Skull Base Day/Esser course
The 7th Rotterdam International Skull Base Day/Esser one day course on orbital and peri-orbital lesions will be held on 23 January 1999. Further details: Mrs K Sipman, POBox 1738, 3000 DR Rotterdam, Netherlands. (Tel: +31 10 4089778; fax: +31 10 4362762)

Ophthalmological Clinic, University of Creteil
An international symposium on the macula will be held on 26–27 March 1999 at the Ophthalmological Clinic, University of Creteil. Further details: Professor G Soubrane, Chef de Service, Clinique Ophthalmologique Universitaire de Creteil, Centre Hospitalier Intercommunal, 40 Avenue de Verdun, 94010 Creteil, France. Fax: 01 45 17 52 27.

Laser eye injuries
A conference on the epidemiology, prevention, diagnosis, and therapy of laser eye injuries will be held in San Jose, California on 25–26 January 1999 during the International SPIE symposium on biomedical optics. Further information: SPIE Organisation, PO Box, Bellingham, WA 98227-0010, USA. (Fax: (+1) 360-647-1445; email: www.spie.org/info/pw)

Office of Continuing Medical Education
The 21st Annual Wilmer Institute's Current Concepts in Ophthalmology will be held on 4–9 February 1999 at the Hyatt Regency Coral Mar Beach Hotel, Dorado, Puerto Rico. Further details: Program Coordinator, Johns Hopkins Medical Institutions, Office of Continuing Medical Education, Turner 20/20 Rutland Avenue, Baltimore, MD 21205, USA. (Tel: (410) 955-2959; fax: (410) 614-8613; email: cmenet@som.adm.jhu.edu)

Ophthalmological Clinic, University of Creteil
The 9th Ophthalmologic Technology Conference will be held on 23–24 January 1999 during the International SPIE symposium on biomedical optics. Further information: SPIE Organisation, PO Box, Bellingham, WA 98227-0010, USA. (Fax: (+1) 360-647-1445; email: www.spie.org/info/pw)

NOTICES
Primary Eye Care
The latest issue of the Community Eye Health (no 26) discusses the importance of primary eye care, particularly in the developing world. For further information please contact Community Eye Health, International Centre for Eye Health, Institute of Ophthalmology, 11–43 Bath Street, London EC1V 9EL. (Tel: (+44) 171 608 6910; fax: (+44) 171 250 3207; email: eyeresource@ucl.ac.uk) Annual subscription £25. Free to workers in developing countries.

Residents’ Foreign Exchange Programme
Any resident interested in spending a period of up to one month in departments of ophthalmology in the Netherlands, Finland, Ireland, Germany, Denmark, France, Austria, or Portugal should apply to: Mr Robert Acheson, Secretary of the Foreign Exchange Committee, European Board of Ophthalmology, Institute of Ophthalmology, University College Dublin, 60 Eccles Street, Dublin 7, Ireland.
XII Congress European Society of Ophthalmology
The XII Congress European Society of Ophthalmology will be held in Stockholm, Sweden on 27 June–1 July 1999. Further details: Congress (Sweden) AB, PO Box 5819, S-114 86 Stockholm, Sweden. (Tel: +46 8 459 66 00; fax: +46 8 661 91 25; email: soe@congrex.se; http://www.congrex.com/soe/)

4th Meeting of the European Neuro-Ophthalmology Society
The 4th meeting of the European Neuro-Ophthalmology Society will be held on 29 August–2 September 1999 in Jerusalem, Israel. Further details: Secretariat, 4th Meeting of the European Neuro-Ophthalmology Society, PO Box 50006, Tel Aviv, 61500, Israel. (Tel: 972-3-514000; fax: 972-3-5175674/972-3-5140077; email: Eunos99@kenes.com)

Ophthalmological Clinic, University of Creteil
An international symposium on the macula will be held on 1–2 October 1999 at the Ophthalmological Clinic, University of Creteil. Further details: Professor G Soubrane, Chef de Service, Clinique Ophtalmologique Universitaire de Creteil, Centre Hospitalier Intercommunal, 40 Avenue de Verdun, 94010 Creteil, France. Fax: 01 45 17 52 27.

Jules François Prize
The 2000 Jules François Prize of $100 000 for scientific research in ophthalmology will be awarded to a young scientist who has made an important contribution to ophthalmology. All topics in the field of fundamental and/or clinical research in ophthalmology will be considered. The application should be sent jointly with a curriculum vitae, the list of all publications, and three copies of the candidate’s 10 most relevant publications to Jules François Foundation Secretary, Professor Dr M Hanssens, Dienst Oogheelkunde, de Pintelaan 185, B-9000 Gent, Belgium. Deadline for applications 31 December 1999.