

MAILBOX

Tear secretion and tear film function in insulin dependent diabetics

EDITOR,—I read the article by Goebbels¹ with interest and would like to share a few opinions with you.² Goebbels stated in his paper that BUT results did not differ between diabetics and controls and also pointed out that BUT is a very rough test for the detection of tear film stability. He found low Schirmer test values and conjunctival squamous metaplasia in diabetics compared with controls. He hypothesised that a decrease in reflex tearing inducing conjunctival surface damage, disturbance of the trophic function of the tear film, or metabolic alterations might be responsible. First of all, we believe with many others that BUT is an invaluable and direct test of tear film stability when performed carefully.²⁻⁴ In addition, a keen observation of the breaking tear film provides a lot of information on the minute changes on the ocular surfaces. We found in our study that BUT scores, Schirmer test values, central corneal sensitivity, and goblet cell density were significantly lower in NIDDM patients compared with controls. NIDDM patients also had significantly higher squamous metaplasia grades. We showed that tear film function and impression cytology variables significantly fared poorly in those patients with diabetes with peripheral neuropathy, decreased corneal sensitivity, and poor metabolic control without any correlation with duration of diabetes and status of retinopathy. We believe that the ocular surface disease in diabetes is characterised by squamous metaplasia and goblet cell loss which seems to evolve in close proximity to the status of metabolic control and peripheral neuropathy. Corneal and conjunctival epithelial damage caused by disruption of tear quantity and quality and diabetic neuropathy may be important determinants of diabetic ocular surface disease.

Our final comment and request to all researchers who carry out impression cytology studies with devotion is that methodology of the procedure should be reported in each paper with photographs of the samples so that we can compare and refine our own procedures despite variability in cytology techniques and difficulties in comparing impression cytology studies with one another. Besides, no impression cytology study should be without information on figures of squamous metaplasia grade and goblet cell densities. Absence or presence of mucin pick up of filter papers must be mentioned without fail since such observations prove noteworthy; mucin being one of the major components in increasing the tear film stability and the wettability of the ocular surface.⁵

MURAT DOGRU

Uludag University School of Medicine, Department of Ophthalmology, Gorukle Bursa 16059, Turkey

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- Dogru M, Katakami C, Nakagawa N, et al. Impression cytology in atopic dermatitis. *Ophthalmology* 1998;105:478-84.

Reply

EDITOR,—Dogru found decreased Schirmer test values and significantly higher grades of squamous metaplasia in NIDDM patients, thus confirming the data we obtained in our study on insulin dependent diabetics. Furthermore, he made two points with regard to break up time (BUT) and impression cytology (IC). Undoubtedly, the determination of the BUT is a helpful tool for the clinical assessment of tear film disorders, especially when showing significantly reduced BUT values. However, there is some question as to whether or not the measurement of the BUT is a sensitive technique for the quantitative and reproducible determination of tear film stability. Even when performed properly, BUT values are often characterised by significant intraindividual variability. In our study, BUT values did not differ between diabetics and controls. Thus, either the technique is not able to detect a difference between groups, or there isn't one. We obtained a total of 1332 IC specimens.

The degree of squamous metaplasia was evaluated in a masked fashion according to a scale described by Tseng as mentioned in the paper. In our opinion, the demonstration of two or three figures of IC samples would provide poor additional information.

M J GOEBBELS

Dozent der Med Fakultät der Univ Bonn, Belegarzt des Krankenhauses Düren, Oberstrasse 45, 52349 Düren, Germany

International Poverty and Health Network

EDITOR,—I read with interest and concern the recent editorial in the *BJO*.¹

I have visited the Kikuyu Eye Unit near Nairobi on a yearly basis since 1992, and have witnessed at first hand both there and in Somalia the enormous burden of poverty and ill health described and quantified in the editorial. What strikes me very forcibly is the sheer number of hugely disadvantaged people. This, and the distressing and widening disparity in health and income between these people and those of us living in developed countries, is well made in the editorial. I have come to feel that efforts at population control should receive a high priority, and in this regard I was surprised and disappointed that the IPHN makes no mention of this in their checklist of strategies to reduce the global burden of poverty and poor health. I would be very interested to hear their response.

ROGER GRAY

Taunton and Somerset Hospital, Musgrove Park, Taunton, Somerset, TA1 5DA

- Heath I, Haines A, Smith R. Open invitation from the International Poverty and Health Network to all health professionals. *Br J Ophthalmol* 2000;84:236-7.

BOOK REVIEWS

Developments in Ophthalmology. Vol 30. Immuno-ophthalmology. Ed U Pleyer, M Zierhut, W Behrens-Baumann. Pp 252; \$215. Basle: Karger, 1999. ISBN 3-8055-6863-0.

This book includes contributions from experts in the field of ophthalmic immunology. Topics covered in the book are concisely summarised, providing relevant aetiological information, clinical presentation, and appropriate treatment of various immune mediated intraocular diseases, as well as ocular adnexal diseases and orbital pathology. To accomplish the objectives of the book, the editors introduce the subject of immunology as it relates to ocular diseases by first providing an excellent overview of the general principles of innate and adoptive immunity along with concepts on regional immunity pertaining to intraocular cavities. Other notable reviews include the immunopathology of Graves' ophthalmopathy, the immunology of lacrimal gland and tear film, and the immunological characteristics of conjunctival and mucocutaneous disorders. Other highlights include an updated review of the immunology of corneal transplantation, immune regulation of uveoretinal inflammation, and immunotherapy of uveal melanoma. Although several of the chapters are well illustrated, few chapters, such as those on scleritis, pemphigoid, and glaucoma, are without diagrams or illustrations of the ocular inflammation. Moreover, the purpose of the chapter entitled "Ocular hypertension and glaucoma associated with scleritis and uveitis" is unclear since this chapter does not cover any aspect of immunology. Although the review of scleritis addresses important issues regarding the immunopathogenesis of scleritis, the authors do not include current information about the histopathological changes noted in necrotising scleritis. Even with these minor issues, however, the editors and contributors have, for the most part, accomplished their set goal of providing current information about the immunopathogenesis of various immune mediated ocular diseases and their management to residents and practising ophthalmologists.

NARSING A RAO

Ocular Inflammation. Basic and clinical concepts. Ed David BenEzra. Pp 528; £120. London: Martin Dunitz, 1999. ISBN: 1-85317-507-2.

This is a multiauthored book with the main author responsible for 12 out of the 30 chapters. All contributors (mainly European) are well known in their respected fields. It is just over 500 pages long and the majority of the text is devoted to uveitis with a chapter each on conjunctival, corneal, scleral, and orbital inflammations. The book is divided into five main sections: General aspects; Diagnostic tests of potential value in chronic non-infectious ocular inflammation; External ocular inflammatory diseases; Intraocular inflammation; and Optic nerve. The first two of these sections deal with underlying disease mechanisms at the basic science level, but just in relation to uveitis and not the other inflammatory disease included in the book. The first chapter on immunosuppression

and immunomodulation is uninspiring and cyclosporin A is even described as a new drug. The chapters on immunological mechanisms underlying uveitis are rather disconnected as they are written by different authors so there is no common theme and they could be quite confusing to the novice. Nevertheless, the chapters on cytokines and HLA are informative but more could have been written on the latter topic and it cries out for a diagram. There are a large number of colour figures but not all of good quality; some fail to show the pathology and some are unnecessary. Diagrams explaining the taking of intraocular specimens would have been useful, as would the inclusion of treatment algorithms using corticosteroids and cyclosporin A for immunosuppression (although one does appear in the chapter on Behçet's disease). The layout is unexciting and this is basically just another textbook on uveitis. In the age of multimedia, a more imaginative layout with shading, coloured text and diagrams, and boxes highlighting key points would have made it much more readable. The non-uveitis chapters are too brief and just as they start to whet one's appetite for more—they end. Yet there are some good chapters, particularly on orbital inflammations (thyroid eye disease is *not* included), ICG, birdshot, and AIDS. The chapter on Behçet's disease briefly mentioned the standard, recognised ISG classification but failed to document it. The most glaring omission was the topic of corneal graft rejection. Apart from a short paragraph on rejection lines it was never mentioned.

This book is overambitious as it tries to cram intraocular, conjunctival, corneal, and orbital inflammations into one text and fails to succeed. I am unsure what market the book is aimed at but it may have a place on some library shelves. Ophthalmology residents, however, should keep their credit cards firmly in their wallet.

PHILIP I MURRAY

NOTICES

Vision 2020: the cataract challenge

The latest issue of *Community Eye Health* (34) discusses cataract blindness and surgery with an editorial by Allen Foster. 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) (0) 20-7608 6909/6910/6923; fax: (+44) (0) 7250 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.

European Association for Vision and Eye Research (EVER)

The European Association for Vision and Eye Research (EVER) will be meeting on 4–7 October 2000 in Palma de Mallorca, Spain. Further details: Secretariat EVER, Postbus 74, B3000 Leuven, Belgium (fax: +32 16 33 67 85; email: EVER@med.kuleuven.ac.be).

Fifth Annual Meeting of the Association for Ocular Pharmacology and Therapeutics

The Fifth Annual Meeting of the Association for Ocular Pharmacology and Therapeutics will be held on 2–5 November 2000 in Birmingham, AL, USA. Further details: Jimmy D Bartlett, OD, Department of Optometry, University of Alabama at Birmingham, 1716 University Blvd, Birmingham, AL 35294-0010, USA (tel: 205-934-6764; fax: 205-975-7052; email: jbartlett@icare.opt.uab.edu).

American Institute of Ultrasound in Medicine—Millennium Ultrasound Course Series

A course entitled "Ultrasound Diagnosis and Management of Fetal Growth Abnormalities" will be held in Las Vegas, Nevada, on 3–5 November 2000. Further details: Stacey Bessling, Public Relations Coordinator, AIUM, 14750 Sweitzer Lane, Suite 100, Laurel, MD 20707-5906, USA (tel: 301-498-4100; email: sbessling@aium.org).

Mind's Eye 2—Psyche and Sight Loss

The Society for Psychosomatic Ophthalmology and the British Psycho-Analytical Society present a conference "Mind's Eye 2—Psyche and Sight Loss" on 4 November 2000 at the Institute of Psycho-Analysis, London. Further details: Mandy O'Keeffe, 67 Avenell Road, London N5 1BT (tel: 020 7288 2359; email: okeeffe@ukgateway.net).

Millennium Festival of Medicine

A festival keynote conference will be held on 6–10 November 2000 at the Queen Elizabeth II Conference Centre, London, as part of the Millennium Festival of Medicine coordinated by the BMA in partnership with leading UK professional medical bodies. The conference will provide healthcare and allied bodies with an overview of the trends and developments which will affect medical treatment and practice. Further details: Christina Gwynne-Evans (tel: +44 (0) 20 7383 6872; email: cgwynne-evans@bma.org.uk).

12th Afro-Asian Congress of Ophthalmology

The 12th Afro-Asian Congress of Ophthalmology (Official Congress for the Afro-Asian Council of Ophthalmology) will be held on 11–15 November 2000 in Guangzhou (Canton), China. The theme is "Advances of ophthalmology and the 21st century". Further details: Professor Lezheng Wu, Zhongshan Eye Center, SUMS, New Building, Room 919, 54 Xianlie Nan Road, Guangzhou 510060, PR China (tel: +86-20-8760 2402; fax: +86-20-8777 3370; email: lwuicv@gzsums.edu.cn).

Singapore National Eye Centre 10th Anniversary International Congress

The Singapore National Eye Centre 10th Anniversary International Congress will be held in conjunction with 3rd World Eye

Surgeons Society International Meeting on 1–4 December 2000 at the Shangri-La Hotel, Singapore. Further details: Ms Hua Meng Lee, The Organising Secretariat, Singapore National Eye Centre, 11 Third Hospital Avenue, Singapore 168751 (tel: (65) 3228374; fax: (65) 2277290; email: snepr@pacific.net.sg).

The Hong Kong Ophthalmological Symposium '00

The Hong Kong Ophthalmological Symposium '00 will be held 4–5 December 2000, in Hong Kong, China. Further information: Miss Vicki Wong, Room 802, 8/F Hong Kong Academy of Medicine, 99 Wong Chuk Hang Road, Aberdeen, Hong Kong (tel: (852) 2761 9128; fax: (852) 2715 0089; email: cchk@netvigator.com).

American Institute of Ultrasound in Medicine—Millennium Ultrasound Course Series

A course entitled "Obstetrical Ultrasound" will be held in Marina del Rey, CA, on 12–14 January 2001. Further details: Stacey Bessling, Public Relations Coordinator, AIUM, 14750 Sweitzer Lane, Suite 100, Laurel, MD 20707-5906, USA (tel: 301-498-4100; email: sbessling@aium.org).

Optometry Study Tour to Kenya, Tanzania, and Zanzibar

The tour offers a wonderful opportunity to optometrists and ophthalmologists to examine eye care in East Africa. It will take place from 28 January to 10 February 2001. Further details: Master Travel, Croxted Mews, 288 Croxted Road, London SE24 9BY (tel: 0208 678 5320; fax: 0208 674 2712; email: tours@mastertravel.co.uk).

First International Congress on Non-Penetrating Glaucoma Surgery

The First International Congress on Non-Penetrating Glaucoma Surgery will take place in Lausanne, Switzerland on 1–2 February 2001. Further details: Dr Tarek Shaarawy, Organising Committee, University of Lausanne, Hopital Ophtalmique Jules Gonin, Avenue de France 15, 1004 Lausanne, Switzerland (tel: 41 21 626 81 11; fax: 41 21 626 88 88; website: www.glaucoma-lausanne.org).

Call for papers—6th European Forum on Quality Improvement in Health Care, 29–31 March 2001, Bologna, Italy

Further details: BMA/BMJ Conference Unit, BMA House, Tavistock Square, London WC1H 9JP, UK (tel: +44 (0) 20 7383 6409; fax: +44 (0) 20 7383 6869; email: quality@bma.org.uk; website: www.quality.bmj.com).

American Institute of Ultrasound in Medicine—Millennium Ultrasound Course Series

A course entitled "Obstetrical and Gynecological Ultrasound" will be held in New York City, NY, on 24–26 August 2001. Further details: Stacey Bessling, Public Relations Coordinator, AIUM, 14750 Sweitzer Lane, Suite 100, Laurel, MD 20707-5906, USA (tel: 301-498-4100; email: sbessling@aium.org).