

0000-0999	Vascular
1000-1999	Diabetes
2000-2999	Inflammatory Retinal/Choroidal Disease
3000-3999	Primary Macula
4000-4999	Retinal Degeneration
5000-5999	Primary Haematological
6000-6999	Optic Disc
7000-7999	Miscellaneous
8000-8999	Tumours
9999	Normal

Figure 2 First page of the coding handbook showing the broad classification.

computer. It nevertheless satisfied the important objective of reducing time spent in front of a terminal and preventing the frustration of inputting potentially redundant information.

The four-digit coding structure was devised by RW and based around a combination of pathological and anatomical parameters and heavily weighted in numbers variables towards the common conditions. The first digit covers the broad area (Fig 2), with increasing layers of subdivision within the next three digits (Fig 3). Codes from 7000 to 7999 are used for conditions that do not logically fall elsewhere in the classification system, with 70- specifying trauma. Increasing detail is imparted by the third figure; 7020, for example, codes for commotio retinae. In this case the fourth figure is not used, indicating that the system is flexible enough to permit expansion. Currently only integers are used, but the system is designed to use letters at any of the four positions, allowing for a massive increase in coding possibilities. The patient is allocated two 4-digit codes to each eye with a supplementary code available if necessary. This solves the potential problem that arises when the broad divisions overlap. For example, optic disc swelling in diabetes mellitus would be given the codes 1000 and 6140. Visual acuity, laser treatment, and the consultant's name are entered as codes: other details are entered directly. The patient display page in the program will decode the demographic details but currently not the diagnostic codes, though these are soon to be incorporated. The report is dictated and a code assigned by the doctor from a 12 page handbook without the need to access the computer. Data entry is carried out by the secretary using a menu-assisted program (Fig 4). No knowledge of the basic dBase programming language is required. After data entry, specific details of each patient are printed out, together with the allocated record numbers. These hard copy details are

#### Fluorescein Database

##### OPENING MENU

1. Update records
2. Find record by name
3. Find patients by diagnostic code
4. Display patient record
5. Edit patient record
6. Back-up database to floppy disc
0. Terminate session

press a number 0 to 6

Figure 4 The opening menu for data input and output.

then filed separately. The operator is prompted to back-up the file to a floppy disc, in a 3-disc rotation system, and intermittently a further floppy disc copy is taken for archiving. Initially, early operator errors allowed some data loss, but this was rapidly retrieved from the backup and hard copy details.

2597 fluorescein angiograms have now been entered into the database over the last 6 years creating a master file of 336 622 bytes. The increasing file size has benefited from the increasing power of the computer hardware, which is directly connected to a printer for the hard copy. In the early stages the smaller computer was perfectly adequate for the modest file size, but it would be tediously slow at this stage.

The fluorescein database has improved access to angiogram records, especially for research, teaching, and medical audit. Quantitative analysis relating to diagnosis, age, time period, and consultant is easily achieved. More specific analysis has benefited from the completeness and speed of the diagnosis-based medical search. The codes themselves have helped to standardise the reports, by forcing comment, for example, of the severity of eschaemia in retinal artery occlusion. The structured approach has benefited the photographer in conveying the important clinical features to be picked up during angiography. It has also facilitated data entry for the secretary.

The acceptability and usefulness of this program are reflected in its long track record, its having been in use at our hospital for 7 years. The program and handbook have already been made generally available and are currently used in many ophthalmology units throughout the country. Interested parties are asked only to pay the cost of the magnetic media and postal charges. The minimum computer requirement is a hard disc, single floppy IBM PC compatible

computer, with the dBase II or dBase 3+ program and any style of printer.

C JENKINS

R WILSON

R MARSH

Western Ophthalmic Hospital, Marylebone Road,  
London NW1 5YE

- 1 World Health Organisation, International classification of diseases. 9th revision. Geneva: World Health Organisation, 1977.
- 2 Systematized Nomenclature of Medicine (SNOMED). 2nd ed. Skokie IL, College of American Pathologists, 1979.
- 3 Côté RA, Robboy S. Progress in medical information management systematized nomenclature of medicine (SNOMED). *JAMA* 1980; **243**: 756-62.
- 4 Benson T. Dawn of a third era. *Health Service Journal* 1990; 600-1.
- 5 Earlam R, Körner, nomenclature, and SNOMED. *BMJ* 1988; **296**: 903-5.

## BOOK REVIEWS

**Case Presentations in Medical Ophthalmology.** By Jack J Kanski, Teifi E James. Pp 116. £14.95. Butterworth-Heinemann: Oxford, 1991.

This book is primarily aimed at doctors preparing for membership of the Royal College of Physicians.

It begins with a short but nevertheless excellent introduction containing instructions on how to examine a short case, which can be applied to all specialties and all examinations.

This small paperback contains 50 short case presentations with clinical photographs and three questions on each case. One further photograph and full answers are to be found at the back of the book.

The illustrations are excellent (as is to be expected from Mr J Kanski) and the questions are well thought out.

Unfortunately a few answers are lacking in advice: for example a painful third nerve palsy is not listed as a potential medical emergency; the importance of examining the other cranial nerves and the palate and nasopharynx in a diabetic patient with a VIth nerve palsy is not emphasised; and a case of retrobulbar neuritis is described when the visual loss is painless, which should alert the physician to alternative diagnoses.

However, despite these few reservations the book is beautifully presented, simple to understand, and would undoubtedly help all aspiring physicians and ophthalmologists as well as junior doctors from other specialties both to pass examinations and to practice safe efficient medicine.

L HOWE

E GRAHAM

**Scanning Laser Ophthalmoscopy and Tomography.** Eds J E Nasemann, R O W Burk. Pp 272. £64. Quintessenz: New Malden, Surrey, 1990.

This emerging technology represents a significant advance in recording fundus appearances. Lower light levels are required than in conventional ophthalmoscopy and fundus photography. Good resolution, both spatial and

MISCELLANEOUS 7000-7999	
7000	Trauma
7010	Choroidal Rupture
7020	Commotio Retinae
7030	Intraocular Foreign Body
7100	Retinal Detachment
7100	Rhegmatogenous detachment
7110	Traction detachment - please also code as to cause
7120	Exudative retinal detachment
7130	Retinoschisis
7140	Retinal cyst
7200	Angioid Streaks
7200	Pseudoxanthoma elasticum
7210	Paget's Disease
7220	Ehler-Danlos
7230	Sickle Cell - please also code under haematological
7240	Other
	0-uncomplicated
	1-with disciform lesion
7300	Ocular albinism
7400	Myopic degeneration
7500	Choroidal folds
7600	Coloboma
7700	Vitreous abnormalities

Figure 3 A sample page from the coding handbook.

temporal, is attained and in the confocal mode a promising degree of three dimensional information can be obtained. In the vast majority of cases dilatation of the pupil is not required. As yet the field of view is limited and since the imaging is digital the transversal (two-dimensional) resolution decreases as the field is enlarged, limited by the pixel (picture points) capacity of the computer and video systems.

Tomography, in which a series of confocal images (typically 32) is recorded, each advancing a small distance axially (typically 50  $\mu\text{m}$ ), then analysed to find the point of maximum intensity, has been applied particularly to the analysis of the normal and diseased optic disc and macula. A number of uncertainties still exist in the interpretation of these data but the accuracy and reproducibility of optic disc measurements compares favourably with other methods. The cornea and anterior segment can also be investigated in this mode.

This book is a presentation of 26 papers, all of high technical quality given at the first international symposium on scanning laser ophthalmoscopy and tomography held in Munich in 1989. The opening papers deal with the principles of scanning laser ophthalmoscopy and an overview of its applications, followed by detailed accounts of angiography, retinal circulation time estimation, linear blood flow estimation, fundus reflectometry, static perimetry, and eye movement measurement. The remaining 12 papers deal with tomography; it is worth reading the last three first to gain a good technical insight.

The book is strongly recommended to all ophthalmologists who wish to keep abreast of this important technique which is bound to have a significant impact in the future. Though representing a heavy capital investment, its potentiality and diversity of application should ensure it a place in future clinical instrumentation.

D W HILL

**Eyelid Surgery.** By J Earl Rathbun. Pp. 290. £95.00. Little, Brown: London, 1991.

This new book is a practical manual based on the author's wealth of personal experience. J Earl Rathbun who is in practice in San Francisco has made a considerable contribution to ophthalmic plastic surgery through his teaching and publications over many years. In this book he presents his preferred techniques for a wide spectrum of eyelid surgery; surgery of the socket is not included. The book assumes little prior knowledge of the subspecialty. Whether describing the anatomy, discussing a classification, or explaining the steps of an operation the text is clear, easy to read, and well-illustrated with clinical and operative photographs supported by line diagrams. The book as a whole is well planned and easy to use. The index is comprehensive and each chapter has a concise list of up-to-date references.

Criticisms are minor. Some of the operative series in black and white are less clear than

those in colour; the description of partial thickness skin flaps might have been included with eyelid and canthal reconstruction rather than basic techniques; the chapter on cicatricial entropion and trichiasis does not cover the treatment of distichiasis in any detail; and the inclusion of a chapter on socket surgery would have been useful.

The book is a pleasure to read. It is likely to appeal mainly to those starting ophthalmic plastic surgery but it would be a valuable addition to any ophthalmic library.

A G TYERS

All titles reviewed here are available from the BMJ Bookshop, PO Box 295, London WC1H 9TE. Prices include postage in the UK and for members of the British Forces Overseas, but overseas customers should add 15% to the value of the order for postage and packing. Payment can be made by cheque in sterling drawn on a UK bank, or by credit card (Mastercard, Visa, or American Express), stating card number, expiry date, and full name.

## NOTES

### European Association for the Study of Eye Complications in Diabetes (EASDEC)

The second meeting of this association will be held in Baden near Vienna, Austria on 5-6 September 1992 prior to the EASD meeting in Prague. The meeting will be run in workshop style and therefore only 100 active participants - in order of application - will be accepted. The topics discussed will be 'Hypertension and diabetic retinopathy', and 'The role of the vitreous in diabetic retinopathy'. Abstracts are invited to reach the organisers by 30 June 1992. Further details from: Professor E M Kohner, President, EASDEC, Diabetic Retinopathy Unit, Department of Medicine, Royal Postgraduate Medical School, Du Cane Road, London W12 0NN, UK or Docteur B Cathelineau, Secretary, EASDEC, Unite d'Ophthalmologie Diabetologique, Hopital Saint Louis, 1 rue Claude Vellefaux, 75475 Paris, Cedex 10, France.

### Retinal Detachment Surgery

A basic course on retinal detachment surgery (with panel discussion by European and North American Faculty as well as case presentations) will be held on 23-24 May 1992 at the Brussels International Conference Centre. The theme will be 'Minimal detachment surgery with segmental buckling and non-drainage'. Further details: Congress Office, Professor Dr I Kreissig, Universitäts-Augenklinik Abt III, Schleichstrasse 12, D-7400 Tübingen,

Germany. (Tel: 07071-293741. Fax: 07071-293730.)

### Glaucoma Group

#### David Cole Travel Fellowship

The David Cole Travel Fellowship, instituted by Merck Sharp & Dohme in memory of Professor David Cole, will assist a visit to a hospital or research centre during the academic year starting 1 October 1992. The award will be equivalent to £2000. The purpose of the award is to enable the successful applicant to gain experience and knowledge in pursuit of a specific project related to glaucoma.

#### Glaucoma Group Research Grant

The Glaucoma group research grant, sponsored by the International Glaucoma Association will be available for a research project clinically orientated to glaucoma for 1992. The award will be equivalent to £2500. The grant may be used towards salary or project expenses or for buying equipment.

#### Glaucoma Group Research Award

The Glaucoma group research award, sponsored by Alcon Laboratories will be given in support of a research project related to glaucoma. The award will be equivalent to £2000.

These awards are available to both medical graduates and non medical scientists resident in the United Kingdom or Ireland. They may be held concurrently with other awards.

For further details: Dr S Nagasubramanian, Secretary Glaucoma Group, Glaucoma Unit, Moorfields Eye Hospital, City Road, London EC1V 2PD, UK. The closing date for applications is the 30 June 1992. The successful candidate will be informed by August 1992.

### International Journal of Sports Vision

The first issue of the *International Journal of Sports Vision* (IJSV) will be published in May 1992. For more information, contact either: Dr Darlene A Kluka, Co-Editor *International Journal of Sports Vision*, The University of Alabama at Birmingham, 117 Education Building, UAB Station, Birmingham, AL 35294-1250, USA (Fax: (205) 934-4963) or Dr Joseph N Trachtman, OD, Co-Editor, *International Journal of Sports Vision*, Institute for Advanced Vision Technology, 26 Schermerhorn Street, Brooklyn Heights, NY 11201, USA. (Fax: (718) 237-1454.) Papers are invited.

### Correction

The following corrections should be made to the paper published by Ben Ezra *et al* (*Br J Ophthalmol* 1990; 74: 350-2). The units for CsA levels in the figures should be  $\mu\text{g/l}$  as expressed in the text and *not*  $\mu\text{g/ml}$ .



## BOOK REVIEWS

L Howe, D W Hill, A G Tyers, et al.

*Br J Ophthalmol* 1992 76: 319-320  
doi: 10.1136/bjo.76.5.319

---

Updated information and services can be found at:  
<http://bjo.bmj.com/content/76/5/319.citation>

---

### Email alerting service

*These include:*

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

---

### Notes

---

To request permissions go to:  
<http://group.bmj.com/group/rights-licensing/permissions>

To order reprints go to:  
<http://journals.bmj.com/cgi/reprintform>

To subscribe to BMJ go to:  
<http://group.bmj.com/subscribe/>