T cells in idiopathic hypereosinophilic syndrome

Following the recent publication by Dr Metz and colleagues, I have corresponded with regard to the possibility that the hypereosinophilic syndrome (HES) may be a manifestation of T_H2 cell clonal proliferation.^{1,2} Just before the publication of my letter, substantial proof for this hypothesis was provided by Cogan *et al.*³ Investigations on peripheral blood lymphocytes from a 30 year old man with the HES identified a monoclonal rearrangement of the T cell receptor β chain. The cultured T cell clone also showed a pattern of cytokine synthesis (interleukins 4 and 5) consistent with a T_H2 origin. This important case report adds further documentary evidence to the rapidly increasing proof that human T cells have T_H1 and T_H2 subsets analogous to their established murine counterparts. Furthermore, this division seems to be highly relevant to the classification and pathogenesis of human T cell associated disease.

D N SLATER

Department of Histopathology,
Rotherham Hospitals NHS Trust,
Moorgate Road, Rotherham S60 2UD

- 1 Metz J, McGrath KM, Savoia HF, *et al.* T cell lymphoid aggregates in bone marrow in idiopathic hypereosinophilic syndrome. *J Clin Pathol* 1993;46:955-8.
- 2 Slater D. T cell lymphoid aggregates in bone marrow in idiopathic hypereosinophilic syndrome. *J Clin Pathol* 1994;47:287.
- 3 Cogan E, Schandene L, Crusiaux A, *et al.* Brief report: Clonal proliferation of type 2 helper cells in a man with the hypereosinophilic syndrome. *N Engl J Med* 1994; 330:535-8.

Book reviews

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(The price and availability are occasionally subject to revision by the Publishers.)

Percutaneous Breast Biopsy. Eds SH Parker, WE Jobe. (Pp 192; \$94.50.) Raven Press. 1993. ISBN 0-7817-0010-8.

At the onset I must state that this book is principally written for radiologists. There are sections covering histology and fine needle aspiration cytology, but the bulk of the book concerns technical and practical aspects of obtaining satisfactory image guided biopsy samples and patient management.

The authors are arguably the world's

leading proponents of image guided needle biopsy sampling of impalpable breast lesions. Although somewhat evangelical in their promotion and enthusiasm about this technique, there is no doubt that the results obtained in their clinical setting are excellent. Their detailed approach and development of the techniques and promotion of multidisciplinary communication are laudable.

The process promoted by the authors makes use of a specialised prone table for stereotaxic localisation couples with the Bard biopsy gun and needle. I suspect the cost of purchase of a prone table specifically for this procedure without a comparative trial between FNA and needle biopsy histology is likely to hinder its acceptance in the cost conscious UK environment. There is no doubt, however, that those wishing to try out this technology in an appropriate setting would find this book extremely valuable, particularly for the practical tips it provides. The manufacturers of the prone table should be encouraged to provide prospective purchasers with a free copy.

This is a guide book for radiologists wishing to use stereotaxic guided needle biopsy. I suggest pathologists who are approached about this technology by their colleagues in radiology could suggest they peruse this book but I could not recommend its purchase for histopathology laboratories.

IAN O ELLIS

Histological Typing of Bone Tumours. 2nd ed. F Schajowicz. (Pp 128; 166 figs.; Softcover DM 89.00.) Springer. 1993. ISBN 3-540-56460-8.

This book is part of the well known series *International Histological Classification of Tumours* which was a collaborative effort, organised by the World Health Organisation, to facilitate the widespread adoption of a uniform cancer nomenclature. The first edition (No 6 in the series) was produced in 1972 and this second edition is now published by Springer. Sadly, Dr Schajowicz died suddenly during the final stages of preparation of this book.

The book starts with a short section on the histological classification of bone tumours, with SNOMED and ICD-O codes, and a section of definitions and explanatory notes. The classification now contains new entities described since the first edition, such as intra-osseous well differentiated osteosarcoma, round cell osteosarcoma, and clear cell chondrosarcoma. Although still firmly based on routine microscopy, the revision also benefits from the inclusion of immunohistochemical findings when these are helpful in diagnosis. The bulk of the book is taken up by 166 figures of histopathological sections, mostly in colour, with some accompanying radiographs and specimen photographs. These are well selected and reproduced and represent classic examples of each tumour type.

The changes made in this new edition reflect the advances that have been made in the diagnosis and classification of bone tumours over the intervening 20 years. It should prove of interest to all involved in bone tumour diagnosis.

J R SALISBURY

Atlas of Diagnostic Cytopathology. Barbara F Atkinson. (Pp 685; 1500 full colour illustrations; £143.00.) Harcourt Brace Jovanovic Inc. 1992. ISBN 0-7216-3528-8.

This multiauthor colour atlas is intended for those embarking on cytopathology, and for established cytopathologists. It is a well written, comprehensive book with 664 pages divided into 19 chapters. There is a clearly written text at the beginning of each chapter. No references are included in the text but there is a short bibliography at the end of each chapter. Differential diagnoses and pitfalls in diagnosis are outlined and where relevant, aspiration techniques and methods of specimen preparation are included. The authors have included not only basic lesions but also some unusual or rare lesions presenting in a particular site.

The first chapter on general cytological principles deserves special mention. It explains fundamental aspects of cytology in detail and lays the ground for the recognition of cytological features described in the rest of the book.

There are over 1500 colour illustrations. Most of the pictures are of high quality and the figure legends provide detailed information with tips on diagnosis. Not only are the classic appearances of a particular lesion highlighted but the cytological variations encountered are also shown.

Sampling by skin scraping is mentioned in connection with the diagnosis of vulvar lesions. This method is also applicable in the diagnosis of superficial skin lesions elsewhere in the body and is of particular benefit in the diagnosis of basal cell carcinomas.

Many books and atlases on cytopathology have been published recently and interest in this specialty is growing. To achieve excellence in this field the basic groundwork has to be sound. This atlas will be a stepping stone towards that goal.

R OOMMEN

An Introduction to Cervical Cytology. Video produced for the British Society of Clinical Cytology by Sheffield University Television. (60 minutes running time; £150.) BSCC Secretariat, Hayes, Middx. 1993.

In the present climate of concern about the widely publicised problems with the cervical screening programme, professional training and education need to be addressed. The British Society of Clinical Cytology has followed up its previous excellent video *Taking Cervical Smears* (1989) with *An Introduction to Cervical Cytology*.

The video was produced as an adjunct to training courses for cytoscreeners, trainee medical laboratory scientific officers, and junior pathologists. It also purports to be a video reference library. The presenter has a good speaking manner and his pace is easy to follow. The material is presented in sections. The first one starts with the rationale and practice of screening, the basic anatomy and histology of the female genital tract, sampling techniques and laboratory organisation. The second section takes the viewer through the contents of a normal cervical smear, inflammation, dyskaryosis, invasive carcinoma and glandular disease.

In the first section, which gives a good basic description of a normal cell, there are

minor inaccuracies such as the diagram of a cell with cilia all around the circumference rather than on the luminal surface. The rationale and practice of screening are well covered, with useful graphs incorporating data from our own and other cervical screening programmes.

The section on basic anatomy and histology is covered completely, although again a novice might assume from the diagrammatic representation that ovulation takes place simultaneously from both ovaries and the ova aggregate in the uterine cavity. The method of relating the histological sections to the relevant areas of the cervix is excellent and the photomicrographs are good.

Sampling techniques are discussed, but the slide appears to be labelled after the smear was taken rather than just before. Laboratory procedures are well covered, but it might have been more appropriate to display an obviously fictional name on the request form. Also the names on the slides were not checked before the slide labels were attached. Although these may appear to be minor faults, they cause tremendous problems in laboratories if slides are mislabelled; the cervical screening programme cannot afford to have any more mistakes made.

The second section, alluded to as the video reference library, does cover all the important topics but could be improved. Several of the photomicrographs are slightly fuzzy, ciliated endocervical cells and immature metaplastic squamous cells are not shown, neither is the "exodus" demonstrated. Smear patterns should have been included. The list of specific infections includes rickettsiae for some unknown reason. The histology of CIN is covered in detail and good examples of dyskaryotic cells are shown, but I take exception to the statement that dyskaryotic cells contain abnormal numbers and forms of nucleoli. It is widely accepted internationally that the presence of nucleoli in dyskaryotic cells is an indicator of microinvasion/invasion. The section on glandular disease is very skimpy and the photomicrographs do not illustrate the features described—namely, vacuoles and acini.

This video is too elementary for trainee pathologists but will be useful for raw recruits to the cytology laboratory before they embark on the recommended four week introductory course. There are not enough photomicrographs illustrating the numerous varieties of benign and abnormal cells and patterns seen in routine screening to describe it as a video reference library, especially in comparison with the Cyto-vision video training package which does precisely that.

My overall impression is that this video, which is well presented, is best suited to medical students and to practice nurses (who must be advised to also see the previous video *Taking cervical smears* for thorough instruction in technique).

GRACE McKEE

Fine Needle Aspiration Cytology. Ed Jennifer A Young. (Pp 355; £85.) Blackwell Scientific Publications. 1993. ISBN 0-632-02393-7.

During the past decade the cytopathology library has expanded from a mere handful of textbooks, which were eagerly absorbed

by the specialty, to a much wider selection from which pathologists will wish to choose. In the field of fine needle aspiration cytopathology Jennifer Young's volume will contend for first place, especially for those cytopathologists who want to see illustrations of May-Grünwald-Giemsa stained examples as well as the more conventional Papanicolaou and haematoxylin and eosin stains.

A wide range of systems is covered, including bone and soft tissues, the eye and its adnexa, and smear preparations of central nervous system material. The editor has maintained a consistency throughout the 21 chapters by 20 authors which include technical procedures, interpretation, diagnostic problems, advantages and limitations of cytopathology in the various systems and quantitative estimates of diagnostic accuracy. The prose style is discursive and so easy to read that lists of diagnostic features and differential diagnoses are not missed. The full treatment of non-neoplastic conditions of the salivary gland and the chapter on the biliary system and pancreas attract particularly favourable comment. Above all, the presentation in two columns of clearly printed text and the generous size, number, and quality of the figures provides a high standard throughout.

The photomicrographs are all in colour and the same size so that comparisons—for example, between types of lymphoma—are easily made. However, there are a few important conditions which are not illustrated—notably lactation and tubular carcinoma in the chapter on the breast.

This is an excellent book which will be a good investment for any pathologist or departmental library where fine needle aspiration is practised or being developed.

E A HUDSON

Carcinogenesis. Ed MP Waalkes, JM Ward. (Pp 492; \$126.00.) Raven Press. 1993. ISBN 0-7817-0124-4.

This book is part of a series on target organ toxicology. For this reason, it deals principally with the role of chemicals in carcinogenesis with little mention of other agents, such as viruses or radiation. It is also a book clearly aimed at experimental animal toxicologists, with most of the chapters concentrating on specific animal models like hepatic tumours in rats or skin tumours in mice. The clinically orientated pathologist is likely to find this approach too narrow for his or her requirements but it will be useful to the specialist looking for a review of chemical carcinogens affecting a particular organ.

The book starts by reviewing the general principles of chemical carcinogenesis and then devotes chapters to organ systems covering liver, gastrointestinal tract, kidney, bladder, respiratory tract, skin, nervous system, male reproductive tract and haemopoietic system. The final chapter details how to perform and document necropsies on experimental animals. The best chapters for human pathologists are those on the gastrointestinal tract, respiratory system, and male reproductive tract.

My main criticism concerns the index. I'm sure that many pathologists might look up a particular chemical or drug in the index. However, much of the most useful

information is tabulated and does not get into the index. For example, phenacetin features in at least three tables, indicating its putative role in human renal tumours, rodent bladder tumours, and rat nasal tumours. It is not mentioned in the index. Even drugs such as cyclophosphamide, which are included in the index, are only referenced where they occur in the text. This fairly simple fault will limit the use of this book.

SUSAN DILLY

Notices

Second International Congress on Vitamins and Biofactors in Life Science (ICVB)

February 16–19 1995

Sheraton Harbor Island, San Diego, California

The purpose of this international Congress is to encourage transfer of basic information concerning the chemistry, biochemistry, and functions of vitamins and biofactors to clinicians and health oriented professionals, as well as to scientists specialising in this area.

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