Letter

Ulcerative colitis and perinuclear antineutrophil cytoplasmic antibodies

The linkage of perinuclear antineutrophil cytoplasmic antibodies (ANCA) with ulcerative colitis has been well described.[1 2] Potential autoantigens such as bactericidal permeability increasing protein[3 4] and non-histone chromosomal proteins[5] have been described and suggested as causes of the perinuclear immunofluorescence. In our laboratory it is our practice to identify ANCA using an immunofluorescent technique and if positive to look for PR3 and myeloperoxidase using a standard enzyme linked immunosorbent assay (ELISA) technique irrespective of the immunofluorescent pattern. Since using this practice there have been some anomalous results on patients who are PR3 positive and myeloperoxidase negative by ELISA but have a perinuclear immunofluorescent pattern. To investigate this further we performed an audit. The results shown in table 1.

Values of PR3 and myeloperoxidase of 10–20 are an estimate based on the optical density, as a quantitative measure was not available at that time. The presence of a pANCA pattern is not reportable in the presence of a positive antinuclear factor. Of the 12 patients with this pattern, eight had a biopsy confirmed diagnosis of ulcerative colitis.

This raises several issues:

–Is this a true reaction to PR3 or a reaction to some contaminating component of the ELISA such as BPI or HMG?

–If PR3 is the antigen, then why is it predominantly fluorescing as a perinuclear pattern?

–In patients with a perinuclear pattern should PR3 levels be measured?

–Some laboratories do not perform immunofluorescence and there is an increasing trend to do only ELISA studies. As a result are some patients being mislabelled?

In conclusion we feel that is important that laboratories perform both immunofluorescence and ELISA on samples suspected of being ANCA positive.

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Table 1 Audit of results

Patient	*Age (years)*	*Sex*	*Clinical diagnosis*	*Immunofluorescent pattern*	*PR3 normal range <10*
EW	72	F	N/A	ANF +ve	13
ZA	68	M	Chronic renal failure	ANF +ve	17
WB	66	F	Livedo reticularis	pANCA	10–20
BS	65	F	Ulcerative colitis	pANCA	10–20
SG	60	F	Diabetes; vascular disease	pANCA	10–20
MC	46	M	Ulcerative colitis	pANCA	10–20
AW	43	F	Ulcerative colitis	pANCA	17
KD	42	M	Ulcerative colitis	pANCA	10–20
CH	39	M	Ulcerative colitis	pANCA	10–20
DB	33	M	Ulcerative colitis	ANF +ve SM +ve	PR3 10–20 MPO 10–20
AL	26	M	Ulcerative colitis	pANCA	17
LS	25	F	Ulcerative colitis	pANCA	53

MPO, myeloperoxidase.

1 Freeman HJ, Roeck B, Devine DV, *et al*. Atypical perinuclear antineutrophil cytoplasmic antibodies after colectomy in inflammatory bowel disease. *Can J Gastroenterol* 1997;**11**:305–10.
2 Bansi DS, Chapman RW, Fleming KA. Prevalence and diagnostic role of antineutrophil cytoplasmic antibodies in inflammatory bowel disease. *Eur J Gastroenterol Hepatol* 1996;**8**: 881–5.
3 Schnabel A, Csernok E, Schultz H, *et al*. Bactericidal permeability increasing protein (BPI-ANCA) in marked chronic inflammatory bowel diseases and hepatobiliary diseases. *Medizinische Klinik* 1997;**92**:389–93.
4 Walmsley RS, Zhao MH, Hamilton MI, *et al*. Antineutrophil cytoplasmic antibodies against bactericidal/permeability-increasing protein in inflammatory disease. *Gut* 1997;**40**:105–9.
5 Sobajima J, Ozaki S, Osakada F, *et al*. Novel autoantigens of perinuclear anti-neutrophil cytoplasmic antibodies (P-ANCA) in ulcerative colitis: non-histone chromosomal proteins, HMG1 and HMG2. *Clin Exp Immunol* 1997; **107**:135–40.

Book reviews

Principles and Practice of Medical Laboratory Science, Vol 2. Medical Microbiology, Virology, and Molecular Technology. A S-Y Leong, ed. (£30.00.) Churchill Livingstone, 1997. ISBN 0 4430 5982 9

This is the second volume in a series written for laboratory scientists. It consists of three sections written by different authors, covering medical microbiology, medical virology, and diagnostic molecular technology. This approach has unfortunately given rise to a very uneven text, leading to an enormous variation in detail and considerable duplication.

The first section on medical microbiology was the most disappointing. The authors state that basic bacteriology will be given only "cursory treatment," and indeed the whole subject is given a superficial treatment in comparison with the other two sections. Fungi and parasites are dealt with in only half a dozen sentences between them, and the chapter on sensitivity, specificity, and predictive values is extremely brief and would have been better expanded and integrated with the rest of the book.

The virology section has much more to commend it. Treatment is nicely outlined, in contrast with the first section. However, there are features which again emphasise the inconsistencies in this book. A glossary is included which is useful but would have been better placed at the end of the book and expanded to include terms in all three sections. The viral DNA section is unnecessarily detailed and duplicates the description of the polymerase chain reaction (PCR) which is covered in the final section, including different diagrams of the process.

The final section is excellent, although there are some omissions—for example, there is no discussion of the ligase chain reaction which is now in routine use for the diagnosis of chlamydia infection in laboratories in the United Kingdom and elsewhere. There is also a rather curious chapter on the diagnostic application of molecular technology which only discusses DNA probes for the diagnosis of infectious diseases (although PCR is discussed in the previous chapter) and then moves on to human genetics and cytogenetics (which are covered at some length), somewhat surprising in a microbiology textbook.

The book would have benefited from a more consistent approach, but despite these criticisms it undoubtedly offers value for money for the microbiology laboratory scientist and provides a good basis for training.

C KIBBLER

IPCS 1,2-Dibromoethane. WHO Environmental Health Criteria 177. (Pp. 137; $27.00.) World Health Organisation, 1977. ISBN 92 4 157177 2

The monographs in this series are designed to give critical reviews of chemicals which may have an impact on the environment and human health. They are generated by a laborious process involving initial input by a party of experts to produce a first draft, which is then circulated to over 150 contact points throughout the world for comment. A second draft is then distributed to members of a task force (numbering 20 in this case) for peer review. Representatives of national and international associations are also invited to join in the task force meetings as observers. After final approval by various members of the International Programme on Chemical Safety (ICPS) secretariat, including the director, the monograph is sent to the publishers. Given the number of cooks in the broth, it is surprising that it took only two years to reach publication from the initial meeting. However, the monograph certainly contains everything anyone would need to know about 1,2-dibromoethane. This substance is used as a scavenger of lead antiknock in petrol (diminishing application) and for fumigating soil, grain, and fruit (now frowned upon by many countries). The book discusses analytical methods to detect it, levels in the environment, kinetics and metabolism in laboratory animals and its effect on these and in vitro systems, effects on humans, and finally effects on organisms in the environment. All these sections are presented in immense detail and, mercifully, there is a summary at the beginning for those seeking only a broad overview. The bibliography of more than 300 references completes the volume which, excluding summaries in French and Spanish, has 137 pages.

At the end of all this, there is a brief conclusion which states that no level of 1,2-dibromoethane exposure is safe to

humans and that its use should be either minimised or abolished.

To be honest, this is intended for environmental toxicologists and the like who may need a source of reference on this chemical to deal with inquiries. As such, the publication is worthy and authoritative. The more general reader is hardly likely to find it interesting.

B WIDDOP

Guide to Medical Informatics, the Internet and Telemedicine. E Coiera. (Pp 376; £29.95.) Chapman Hall Medical, 1997. ISBN 0 4127 5710 9.

Pathology and medicine have been revolutionised in the last 10 years by advances in our understanding of the molecular basis of disease. The next 10 years will see the impact of information technology (IT) produce even greater changes in the way we practice—changes that will spill over into every aspect of our lives. If you are interested the role IT has played until now and where it may well take us in the next few years, this book is timely as a guide to three separate but closely related areas.

The book is compact at just over 375 pages but covers the three subjects in the title in an intelligent and illuminating way. It is not one of the standard larger tomes consisting mainly of screen dumps and web sites; the text is factual and illustrations are sparse and schematic. The topics are appropriately interwoven, beginning with the basic concepts of informatics, followed by health care information systems, protocols, coding, and classification. The technical aspects of communication are outlined before moving into the internet and world wide web, and finally there is a section covering intelligent decision support systems.

This book is not for everyone, but if you have an interest in IT or how laboratory computer systems are organised, or have ever been involved in discussions on the use of computers in a medical setting, this is the guide you should use as background reading.

J RASHBASS

Notices

Non-gynaecological and fine needle aspiration cytology course

Oxford Cytology Training School, John Radcliffe Hospital

1–5 June 1998

A one week course suitable for trainee and career medical staff and clinical scientists. Recognised for CME. Some accommodation available. Course fee £300. FNA cytology component (4–5 June) may be attended separately, £125.

Course organiser Dr I D Buley, Consultant Pathologist, John Radcliffe Hospital, Oxford OX3 9DU. Further details from Ms Patsy King, tel 01865 220510.

Royal College of Pathologists Histopathology Update

University of Liverpool, UK

18–19 June, 1998

A two day intensive update on current aspects of histopathology and cytopathology designed for candidates preparing for the MRCPath examination as well as for qualified histopathologists wanting to update their knowledge. Fee £75 inclusive of overnight accommodation and full board.

Full course details from: Professor C S Foster, Department of Cellular and Molecular Pathology, University of Liverpool, Duncan Building, Daulby Street, Liverpool L69 3GA, UK; tel 0151 706 4480; fax 0151 706 5883; email: christopher.foster@liv.ac.uk

Third National Conference of the British Society for the Study of Vulval Disease

13–15 September 1998, Oxford, UK

The programme includes lectures, workshops, and poster sessions on topics including vulval cancer and VIN, paediatric vulval disease, Viral diseases of the vulva, and inflammatory vulval disease. Speakers will include Dr M Anderson, Dr L Brown, and Dr M K Heatley.

Registration £150 (members), £200 (non-members), £100 (trainees).

Further information from Dr Fenella Wojnarowska, Secretary BSSVD, Department of Dermatology, Churchill Hospital, Old Road, Headington, Oxford OX3 7LJ, UK; tel 01865 228236; fax 01865 228233.

XXII International Congress of the International Academy of Pathology and 13th World Congress of Academic and Environmental Pathology

18–23 October 1998, Nice, France

The scientific programme will feature an opening lecture on "Lymphotropic herpes viruses" and two long courses on immunocytochemistry and inflammatory diseases of the gastrointestinal tract. There will also be a daily guest lecture, short courses, seminars, symposia, free papers, and companion meetings.

For further information contact: Convergences/IAP98, 120 ave Gambetta, 75020 Paris, France; tel (+33) 1 43 64 77 77; fax (+33) 1 40 31 01 65; email: converge@iway.fr; internet: http://www.convergences.fr