generally showed considerable immunosuppression (CD4+ counts <200 cells/ml in 93% of cases), and had previously suffered from other AIDS defining pathologies (86.5%). We hypothesised that immunosuppression, HIV clinical stage, and CNS HIV related opportunistic diseases were independent seizure risk factors. Crude univariate and multivariate analyses were done by means of Fisher’s exact test and logistic regression and the results, summarised in table 2, were expressed as odds ratios with the corresponding 95% confidence interval and Fisher’s exact test or likelihood ratio p values (SPSS 8.0 for Windows).

Crude univariate analysis disclosed that immunosuppression, HIV clinical stage, and several CNS HIV related opportunistic diseases behaved as important risk factors, as well as CNS pathologies unrelated to HIV, analysed as a group, did. However, when dichotomised CD4+ lymphocytes counts, HIV clinical stage, and relevant CNS pathologies were simultaneously introduced, in conjunction with sex and age as potential confounders, in a logistic regression model, immunosuppression and HIV infection clinical stage lost all their influence, while the effect of most HIV related CNS opportunistic diseases was maintained or even enhanced, in the same way as occurred with CNS pathologies unrelated to HIV.

Neither immunosuppression nor HIV clinical stage behave as independent risk factors, and their apparent implications are explained through HIV opportunistic CNS pathologies. CNS toxoplasmosis and CNS lymphoma are very strong risk factors of new onset seizures in HIV infected patients. The role of multifocal progressive leukoencephalopathy and HIV unrelated pathologies, though not to be doubted, appear to be much smaller. The implication of HIV by itself appears weak, if at all, and the elucidation of its role would require further well designed cohort or case-control studies in which the diagnosis of HIV encephalopathy would be done on a neuropathological basis in cases as well as in controls, a condition very difficult to fulfil in common clinical practice.

The univariate and multivariate analysis of hypothetical risk factors of new onset seizures in our HIV infected patients is shown in Table 2. Patients identified in a significant number of cases were mostly in relation to opportunistic (generalised 49, partial four, not classifiable according to those of Garg’s. Most of registered.

The univariate and multivariate analysis of hypothetical risk factors of new onset seizures in our HIV infected patients is shown in Table 2. Patients identified in a significant number of cases were mostly in relation to opportunistic (generalised 49, partial four, not classifiable according to those of Garg’s. Most of registered.

Letters to the editor

HIV infection and seizures

Editor,— We read with interest the article from Dr Garg.1 We are just finishing a case-control study about risk factors for new onset seizures among HIV infected patients. All HIV infected patients hospitalised between 1 January 1992 and 31 March 1999 entered the study. Those suffering from any type of recent onset seizure were included as “cases”. Two “controls” per case were randomly chosen matched by year of hospitalisation. Semiological type of seizure, CD4+ lymphocyte counts (dichotomised at 200 cells/ml), HIV infection clinical stage (dichotomising C = A or B), opportunistic HIV related central nervous system (CNS) diseases, CNS pathologies not related to HIV, age and sex, were registered.

Fifty four patients were included as cases. Their general clinical characteristics were in accordance with those of Garg’s. Most of them had generalised tonic-clonic seizures (generalised 49, partial four, not classifiable one), and their causes, summarised in table 1, were mostly in relation to opportunistic HIV related CNS diseases (36/54 cases). Nevertheless, CNS pathologies not related to HIV or with no specific cause could be identified in a significant number of cases (8/54 and 10/54 respectively). Patients

Table 1 Presumed aetiologies of new onset seizures in the 54 HIV infected patients included as cases in our study

<table>
<thead>
<tr>
<th>CNS pathologies related to HIV</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focal</td>
<td>29</td>
</tr>
<tr>
<td>Toxoplasmosis</td>
<td>19</td>
</tr>
<tr>
<td>Lymphoma</td>
<td>6</td>
</tr>
<tr>
<td>Progressive multifocal</td>
<td>4</td>
</tr>
<tr>
<td>leukoencephalopathy</td>
<td></td>
</tr>
<tr>
<td>Diffuse</td>
<td>7</td>
</tr>
<tr>
<td>HIV encephalopathy</td>
<td>5</td>
</tr>
<tr>
<td>Tuberculous meningitis</td>
<td>1</td>
</tr>
<tr>
<td>Encephalitis</td>
<td></td>
</tr>
<tr>
<td>CNS pathologies not related to HIV</td>
<td>8</td>
</tr>
<tr>
<td>Infectious encephalitis</td>
<td>2</td>
</tr>
<tr>
<td>Cranioencephalic traumatium</td>
<td>2</td>
</tr>
<tr>
<td>Cerebrovascular</td>
<td>1</td>
</tr>
<tr>
<td>Neuroophalysis</td>
<td>1</td>
</tr>
<tr>
<td>Foscarnet therapy</td>
<td>1</td>
</tr>
<tr>
<td>Gloma</td>
<td>1</td>
</tr>
<tr>
<td>Idiopathic</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 2 Results of univariate and multivariate analysis of hypothetical risk factors of new onset seizures in our HIV infected patients

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>p Value (Fishers)</th>
<th>95% CI</th>
<th>Univariate analysis</th>
<th>p Value (Fishers)</th>
<th>95% CI</th>
<th>Multivariate analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD4+ count (&lt;200 or ≥200 cells/ml)</td>
<td>0.000</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV infection clinical stage (C = B or A)</td>
<td>0.001</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNS toxoplasmosis</td>
<td>0.001</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNS lymphoma</td>
<td>0.001</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV encephalopathy</td>
<td>0.001</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Progressive multifocal</td>
<td>0.001</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>leukoencephalopathy</td>
<td>0.001</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNS pathologies not related to HIV</td>
<td>0.001</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex (female vs male)</td>
<td>0.619</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OR = odds ratio; CI = confidence interval; LLR = logarithm of the likelihood ratio.
derangement.1 Even in patients with definite HIV encephalopathy whether seizures are caused by direct HIV infection of brain or some associated toxic/metabolic abnormality remains to be established. I agree with Gaspar and Alvarez that a well designed cohort with diabetic encephalopathy logically proved HIV encephalopathy patients with seizures or without seizures is required to establish the role of direct HIV infection of brain in the aetio-pathogenesis of new onset of seizures in these patients.


Medical restrictions to driving: awareness of patients and doctors

EDITOR.—We were interested to read the article by Kelly et al on the awareness of patients and doctors of medical restriction to driving published recently.1 It reported that “Doctors’ knowledge of current licensing policy and action to be taken if a patient was not eligible to drive was poor”. This led us to conduct our own research among hospital doctors, general practitioners (GPs), and medical students.

We used the doctors’ questionnaire from the study by Kelly et al to investigate local knowledge of driving restrictions. We interviewed 50 hospital doctors from a variety of specialties (14 house officers, 12 senior house officers, 14 registrars, and 10 consultants) at the Queen Elizabeth Hospital, Birmingham; 23 GPs from five different practices around Birmingham with experience ranging from GP registrars to those qualified 30 years; and 30 fourth year medical students. Participation was voluntary and anonymous.

Our results were similar to those reported by Kelly et al. Knowledge of the age at which licences should be reviewed for fitness to drive was generally around the correct age of 70 years (see table 1).

When asked to name conditions that should be reported to the Driving Vehicle Licence Authority (DVLA) epilepsy, stroke, and diabetes were the most frequently given answers in all three study populations. Four hospital doctors and one medical student did not know that conditions should be reported to the DVLA. Nobody stated that the patient’s insurance company should be informed. Table 2 summarises the knowledge of specific restrictions among the three study populations.

For the five conditions for which specific restrictions were selected an average of 15.6% of GPs gave correct complete advice, while hospital doctors scored 14.6%, and medical students 5%. A χ² test demonstrated that there was no significant difference in knowledge between GPs and hospital doctors (p=0.85). Interestingly, 83% of GPs said that they would obtain further information about driving restrictions from leaflets produced by the DVLA, while only 16% of hospital doctors and no medical students knew about such publications.

These results appear to agree with the findings of Kelly et al.1 They indicate that there may be a failure to communicate driving restrictions to patients as many medical practitioners are unaware of the existence or specific details of present legislation. GPs’ spontaneous knowledge of driving restrictions is generally poor. However, with frequent repetition, it is hypothesised that knowledge could be enhanced by suggesting that the high levels of awareness and access to DVLA publications may be sufficient to advise patients accurately. The success of this strategy is dependent upon basic knowledge being sufficient to know when to refer to such information.

Medical restrictions on driving form an important subject area because of the implication for both the individual and other road users. Many in the medical profession are not familiar with this area of knowledge. The importance of diabetes mellitus coexistant with other endocrinopathies, as shown by primary hyperparathyroidism,2-6 is a result of the fact that, since both type 2 diabetes and primary hyperparathyroidism are age related,7-9 their prevalence in old age might be sufficiently high to result in their coexistence by pure chance, or because hypercalcaemia can be complicated by insulin resistance.10 Support for the latter theory comes from the case report of a 56 year old woman presenting simultaneously with type 2 diabetes and primary hyperparathyroidism, in whom parathyroidectomy resulted in reversal of glucose intolerance.11 This therapeutic “coup” was validated by the fact that, postoperatively, the patient continued her antidiabetic mediation (gli- clazide) for three months as a result of excellent control (characterised by glycated haemoglobin of 4.6%), a subsequent 75 g oral glucose tolerance test yielded normal results.

Comment

The prevalence of diabetes mellitus may be as high as 7.8% among patients with proven primary hyperparathyroidism,1 either as a result of the fact that, since both type 2 diabetes and primary hyperparathyroidism are age related,7-9 their prevalence in old age might be sufficiently high to result in their coexistence by pure chance, or because hypercalcaemia can be complicated by insulin resistance.10 Support for the latter theory comes from the case report of a 56 year old woman presenting simultaneously with type 2 diabetes and primary hyperparathyroidism, in whom parathyroidectomy resulted in reversal of glucose intolerance.11 This therapeutic “coup” was validated by the fact that, postoperatively, the patient continued her antidiabetic medication (gli-clazide) for three months as a result of excellent control (characterised by glycated haemoglobin of 4.6%), a subsequent 75 g oral glucose tolerance test yielded normal results.


SARA ORMEROD
M T E HEAFIELD
Birmingham Neurosciences Centre,
Queen Elizabeth Hospital, Birmingham
B15 2TH, UK


O M P JOLORE
Department of Medicine for the Elderly,
Tameside General Hospital, Fountain Street,
 Ashton under Lyme OL6 9RW, UK

Table 1 Knowledge of age at which licences should be reviewed for fitness to drive

<table>
<thead>
<tr>
<th>Mean age for licence review (years)</th>
<th>Range of answers given (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP</td>
<td>69.2</td>
</tr>
<tr>
<td>Hospital doctors</td>
<td>67.5</td>
</tr>
<tr>
<td>Medical students</td>
<td>67.6</td>
</tr>
</tbody>
</table>

Table 2 Knowledge of specific restrictions

<table>
<thead>
<tr>
<th>Condition</th>
<th>% of correct advice (% of incorrect advice)</th>
<th>GP (n=29)</th>
<th>Hospital doctors (n=25)</th>
<th>Medical students (n=17)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epilepsy</td>
<td></td>
<td>4 (43)</td>
<td>14 (26)</td>
<td>0 (43)</td>
</tr>
<tr>
<td>Stroke</td>
<td></td>
<td>13 (26)</td>
<td>2 (26)</td>
<td>0 (13)</td>
</tr>
<tr>
<td>Meningococcal infection</td>
<td></td>
<td>0 (0)</td>
<td>1 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Abdominal aortic aneurysm &gt;5 cm</td>
<td></td>
<td>2 (0)</td>
<td>41 (0)</td>
<td>13 (0)</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td></td>
<td>0 (0)</td>
<td>48 (0)</td>
<td>23 (0)</td>
</tr>
</tbody>
</table>
BOOK REVIEWS

The reviewers have been asked to rate these books (or CD-ROMs) in terms of four items: readability (or technical quality), how up to date they are, accuracy and reliability, and value for money, using simple four point scales. From their opinions, we have derived an overall “star” rating: * = poor; ** = reasonable; *** = good; **** = excellent.


The fifth edition of Bedside Cardiology is a refreshing educational read to all training in cardiology as well as established consultants in cardiology and those with an interest in the subject. Dr Constant is Associate Clinical Professor at the State University of New York at Buffalo. He clearly is an expert clinician. This book has a unique style incorporating what the author calls the Socratic method of teaching. The information is presented very much as a question and answer format for programmed learning.

Cardiac diagnosis in recent years has tended to become more focused on accurate non-invasive investigations rather than an in-depth precise clinical bedside diagnosis. This book would tend to redress that trend and focus the emphasis again on accurate examination. Anyone teaching medical students or postgraduate students would greatly benefit from their diagnostic acumen with a careful examination of this book. The author emphasizes many important aspects of a clinical examination and educationally the discussion of false positive and false negative signs that every technology suffers from is particularly valuable.

I found this a highly educational and exciting book to read. The author has a style which attracts you to constantly read every section and it is very difficult to skim any section for fear of losing valuable information.

The chapters on the jugular venous pressure and arterial pulses are particularly educational. This book is essential reading for all those involved in clinical cardiology, not only to enhance their own diagnostic acumen but also to refresh their knowledge, enabling them to become better teachers of the bedside manner of diagnosing and teaching cardiology.

D J COLTART
Consultant Cardiologist/Clinical Director, Cardiothoracic Unit, St Thomas’ Hospital, London, UK


The stated aim of this book is to be a “must for all of us who are involved in promoting physical activity and advising people who are interested in exercise”. Its target audience is diverse and includes specialists in sports medicine, general practitioners, sports scientists, and trainers. Individual chapters cover most aspects of exercise and range from a general overview of the methods of promoting physical activity in primary care to the specific problems of altered reproductive function in endurance athletes and the physiological adaptations of altitude training. There are excellent chapters on exercise and diabetes and exercise and hypertension, with a chapter concentrating on the important interaction between exercise and psychological well being. Concise summaries are provided for all chapters and the most important learning points are highlighted in boxes. Multiple choice questions are also provided at the end of each chapter which allow the reader to test their knowledge. The book is well referenced and up to date, but deficiencies in the literature are acknowledged by the authors.

Anyone with an interest in sports medicine will find something in this book to interest them. It is well written and provides a concise yet comprehensive overview of the benefits and hazards of exercise.

R J POWELL
Clinical Immunology Unit, Queen’s Medical Centre, Nottingham, UK


The first section comprises three chapters. The first chapter is a brief history of the origins of a united Europe, the administrative bodies, how legislation is passed, and the implications for healthcare professionals. Chapter 2 focuses on the differences between EU member states by region: English speaking countries (UK and Republic of Ireland), Benelux countries (Belgium, the Netherlands, and Luxembourg), French speaking countries (France, Belgium, Switzerland (although not part of the European economic area), and Luxembourg), German speaking countries (Germany, Austria, Switzerland, and Luxembourg), Norden (Denmark, Finland, Iceland, Norway and Sweden), and Southern Europe (Spain, Portugal, Italy, and Greece). The organisation of healthcare systems, education and clinical training, terms and conditions of employment, practical differences in the workplace, recognised qualifications and examination grades, culture, and ethics are all outlined. In the third chapter the practical points of moving abroad are covered including two valuable checklists of the costs of moving abroad and planning a move.

The second section comprises details relevant to the 19 individual countries, including the United Kingdom. Obviously this book should be in every medical library. But would it be a worthwhile investment for someone who is going to work in Europe, especially as they will usually only be working in one country? The first section, of 43 pages, provides such a wealth of general information and advice that the specific information provided about the country to which you intend to move and the others is so interesting, that the answer is “Yes.”

Oh, and whatever you do, ensure that you have the necessary qualifications, or can acquire the recognised equivalents abroad, such that you can return to your home country—comprehensive recognition of qualifications throughout Europe is not yet with us.

PHILIP D WELLSBY
Consultant Physician, Western General Hospital, Edinburgh, UK

www.postgradmed.com

Letters, Book reviews, CD-Rom reviews, Diary, Correction
CD-ROM REVIEW

Blood Pressure Measurement. Produced by the British Hypertension Society. BMJ Publishing Group; £47.00. ISBN 0727-913743.****

This CD-ROM specifies on its outside cover, in some detail, the minimum system requirements. These will not be met by all equipment currently in use in medical libraries nor by bottom of the range home computing. The technical qualities of the CD-ROM are excellent. It is easy to read, the sound production is clear (perhaps a little loud for use in library computer rooms), and it is user friendly. The content reflects current British Hypertension Society (BHS) guidelines and includes, in addition to historical notes, relevant explanation of different techniques used in incorporating ambulatory blood pressure measurement, measurement in special populations, and finally the rudiments of equipment evaluation.

The main features are detailed instructions in the technique of blood pressure measurement, pointing out common pitfalls and self-ironing out. The material presented is up to date and lends itself to use in learning and assessment tutorials geared to the level of the learner group. The failure of the BHS measurement group to come up with unequivocal recommendations for standard sphygmomanometer cuff bladder dimensions will limit the shelf life of the BHS production and limits this reviewer’s value for money verdict to a recommendation of purchase by institutions rather than individuals.

JE F POHL
Consultant Cardiologist,
Leicester General Hospital, Leicester, UK

DIARY

Falk Symposia
1–2 October 2000: Non-neoplastic diseases of the anorectum—an interdisciplinary approach (Freiburg, Germany)
3–4 October 2000: Immunosuppression in inflammatory bowel diseases—standards, news, and future trends (Freiburg, Germany)
12–13 October 2000: Biology of bile acids in health and disease (Den Haag, The Netherlands)
4 November 2000: Chronic inflammatory bowel diseases—progress and controversies at the turn of the century (Bucharest, Romania)
Details: Falk Foundation eV–Congress Division, Leinenweberstr 5, PO Box 6529, D-79041 Freiburg, Germany (tel: +49 (0) 761 130340, fax: +49 (0) 761 1303439, email: symposia@falkfoundation.de).

Ninth International Symposium on celiac disease
10–13 August 2000: Hunt Valley, MD, USA
Details: Althea Pusateri, Program Coordinator, University of Maryland School of Medicine, 655 W Baltimore Street, Baltimore, MD 21201, USA (tel: +1 410 706 3957, fax: +1 410 706 3103, web site: http://www.celiaccenter.org).

Royal College of Physicians of Edinburgh
2–15 September 2000: Healthcare for older people—the UK experience (course)
7–8 October 2000: Stroke treatment and service delivery (consensus conference)
Details: Education, Audit, and Research Department, Royal College of Physicians of Edinburgh, 9 Queen Street, Edinburgh EH2 1JQ, UK (tel: +44 (0) 131 225 7324, fax: +44 (0) 131 220 4393, web site: www.rcpe.ac.uk).

Royal College of Physicians of Edinburgh/Scottish Intercollegiate Guidelines Network
3 November 2000: Symposium on clinical effectiveness, clinical guidelines and clinical standards
Details: Mrs Anne Fairbairn, Coordinator for Research and EBM, Royal College of Physicians of Edinburgh, 9 Queen Street, Edinburgh EH2 1JQ, UK (email: a.fairbairn@rcpe.ac.uk).

3rd Teupitz Colloquium
17–20 September 2000: Basic Research in Endocrine Dermatology
Details: Professor Dr Ch C Zouboulis, Department of Dermatology, University Medical Center Benjamin Franklin, Free University of Berlin, Hindenburgdamm 30, 12200 Berlin, Germany (tel: +49 30 84 45 28 08, fax: +49 30 84 45 42 62, email: zoubbere@zedat.fu-berlin.de).

St Mark’s Hospital & Academic Institute
16–18 October 2000: Frontiers in colorectal disease (lecture course)
Details: The Administrator, St Mark’s Academic Institute, St Mark’s Hospital, Northwick Park, Harrow, Middlesex HA1 3UJ (tel: +44 (0) 20 8235 4046/8, fax: +44 (0) 20 8235 4039, email: e.power@ic.ac.uk; web site: www.stmarkshospital.org.uk).

CORRECTION

Iron deficiency anaemia—a clinical challenge
We regret that an error occurred in the above editorial by Wurm and Wicks in the April issue (2000;76:193–4). In referring to a related paper in the same issue by Willoughby and Laitner (2000;76:218–22) the name of Dr Laitner was inadvertently misspelt. Our apologies to Dr Laitner.

J E F POHL
Consultant Cardiologist,
Leicester General Hospital, Leicester, UK