- 6 Bertram M, Bonsanto M, Hacke W, *et al*. Managing the therapeutic dilemma: patients with spontaneous intracerebral haemorrhage and urgent need for anticoagulation. *J Neurol* 2000; 247:209-14.

Delirium episode as a sign of undetected dementia among community dwelling elderly subjects

Rahkonen *et al*¹ examine the complex issue of outcome after an episode of delirium and, in particular, whether an episode acts as an indicator of undetected dementia. Poor cognitive outcomes, including dementia, are well recognised after delirium but it is unclear whether delirium is merely a marker for dementia or if an episode contributes to the development of enduring cognitive impairment, possibly by a neurotoxic or kindling-type mechanism. Patients with mild cognitive impairment were not excluded at the outset but it is clear that there was a relation between mini mental state examination (MMSE) scores immediately after resolution of DSM IIIR delirium and risk of subsequent dementia. Given that persistent symptoms are common in delirium,² one possible explanation is that these cases reflect unresolved subclinical delirium or that incomplete treatment of delirium is a risk factor for subsequent cognitive decline.³ The data should allow estimation of the frequency of dementia in those patients with MMSE scores within the normal range after full resolution of DSM IIIR delirium. This information is highly relevant to planning of post-delirium management and although the MMSE does not provide a sensitive measure of the neuropsychological disturbances of delirium, may shed some light on whether these findings relate to persistent cognitive deficits of delirium that are measured on the MMSE.

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- 1 Rahkonen T, Luukainen-Markkula R, Paanila S, *et al*. Delirium episode as a sign of undetected dementia among community dwelling elderly subjects: a 2 year follow up study. *J Neurol Neurosurg Psychiatry* 2000;69:519-21.
- 2 Levkoff SE, Evans DA, Liptzin B, *et al*. Delirium: the occurrence and persistence of symptoms among elderly hospitalised patients. *Arch Intern Med* 1992;152:334-40.
- 3 Meagher DJ, Trzepacz PT. Delirium phenomenology illuminates pathophysiology, management and course. *J Geriatr Psychiatry Neurol* 1998;11:150-7.

Rahkonen and Sulkava reply:

We thank Meagher for his interest and for his comments on our paper. In the Kuopio delirium study, the disappearance of delirium (according to the DSM-III-R) was ascertained carefully. Instead of being discharged to their own homes (after the treatment of delirium and its underlying causes) the patients were transferred to a rehabilitation centre. During the 7 to 14 days stay in the rehabilitation ward the disappearance of delirium was confirmed. However, some symptoms also appearing in delirium, such as disturbances of the sleep-wake cycle or mild memory deficits, may have still been detected in these elderly patients, but they did not fulfil the diagnostic criteria for delirium any more.

In the Kuopio delirium study, 27% of the community dwelling elderly patients without serious predisposing factors for delirium were

diagnosed as having mild dementia immediately after the resolution of the delirium. The rate of subsequent dementia in the remaining non-demented patients was three out of 11 (27%) with the initial score on the mini mental status examination 24 or over after the delirium subsided (the incidence rate of dementia was 18.2/100 person-years). In the patients with an MMSE score less than 24 the rate of subsequent dementia after resolution of delirium was 11 out of 26 patients (42%) (the incidence rate of dementia was 25.4/100 person-years). However, in our article we published only the rate of the subsequent dementia in all the patients. The number of patients in the groups based on the MMSE scores was small and the usefulness of the scores in diagnosing dementia was limited in these elderly patients (mean age 82 years). In our study, no corrections were made to the scores of the MMSE test because of vision or hearing impairment or limited education.

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CORRECTIONS

Bhakta B, Cozens JA, Chamberlain MA, *et al*. The impact of botulinum toxin type A on disability and carer burden due to arm spasticity after stroke: a randomised double blind placebo controlled trial. *J Neurol neurosurg Psychiatry* 2000;69:217-21.

In table 2, p219 in the column relating to carer burden, BT-A, the values -0.77 (-1.8, 0) should read -0.67(-1.8, 0) and -1.0 (-2.0, 0) should read -0.5(-2.0, 0)

Bradshaw JL, Mattingley JB. Allodynia: a sensory analogue of motor mirror neurons in a hyperaesthetic patient reporting instantaneous discomfort to another's perceived sudden minor injury? *J Neurol Neurosurg Psychiatry* 2000;70:135-6. On page 136, para 3, line 8, the phrase "don't do that (meaning not to show him); he actually felt it" should have read "don't do that (meaning not to show him suddenly); he actually felt it".

Without the word *suddenly* the significance may be lost—It was because he "received the message suddenly" that he felt it (the experience of hyperaesthesia).

BOOK REVIEWS

Essentials of Clinical Epilepsy: 2nd Edition. By A GUBERMAN and J BRUNI. (Pp 207, £27.50). Oxford: Butterworth Heinemann, 1999. ISBN 0 7506 7109 2.

The authors of this text have sought to provide a handbook in which they present the core clinical knowledge on epilepsy while aiming to be comprehensive and up to date. Chapters cover the usual topics from epidemiology through to surgical treatment and this slim volume certainly packs in a huge amount of information. The reading lists are

very useful with statistical information and data from up to date studies. Inevitably a book whose text is made up almost entirely of bullet points proves very difficult to read, and this format does not allow enough space for critical appraisal of the reference studies which the reader will hopefully be prompted to look up. The authors practical approach to managing epilepsy is useful and I would have liked to have seen more of this. Anticonvulsant drugs are listed with standard accounts of pharmacokinetic and pharmacodynamic data. Most readers would have been interested in a discussion of the relative merits of the newer anticonvulsant drugs and the quality of evidence supporting their use in comparison with the older drugs.

This is an excellent little handbook well suited as an introductory reference text for the authors stated target audience of residents in training and general physicians.

S J WROE

Central Nervous System Diseases: Innovative Animal Models From Lab to Clinic. Edited by D I P EMERICH, R L DEAN III, and P R SANBERG. (Pp 512, US\$145.00). New Jersey: Humana Press, 2000. ISBN 0 896 03724 X.

This book takes as its main theme the neurodegenerative disorders and animal models of them for assessment and treatment. The book divides into five sections and concentrates on Alzheimer's, Parkinson's and Huntington's disease along with traumatic-ischaemic brain damage before concluding with some clinically relevant topics. The authors of each chapter are leaders in their field so that the accounts are generally well written, up to date, and authoritative—although some fields move so fast that some chapters in this book are already out of date. For example, the chapter on transgenic Huntington's disease mouse models by Gill Bates and coworkers is already missing some new interesting pieces of information on the possible pathogenesis of this condition. This having been said the large section, devoted to Huntington's disease in this book is welcome given just what an exciting field of research this is at the moment.

The overall structure of this book using sectional headings to group chapters is helpful, although the chapters themselves are a little uneven in their presentation. For example, the chapter on neural grafting by Roitberg *et al* consists of 27 pages of solid text with no figures whereas the chapter by Hantraye *et al* on primate models of Huntington's disease combines figures and text. The result is that the second is more accessible whereas the more wordy chapters are off putting even to those of us who are interested in the field. This also applies to the opening chapter on the cholinergic hypothesis of Alzheimer's disease, which can derail the reader before he has really got interested in the rest of the book.

This book presents an interesting collection of chapters, which provides a useful adjunct to those involved in research in this area of neuroscience, but it is not a book that will appeal to neurologists unless they are keen to update themselves on the emerging new therapies being developed in laboratories around the world. It is therefore a useful addition to the libraries of a few, rather than many which is a pity given its content and relevance to neurology in the next century.

ROGER BARKER