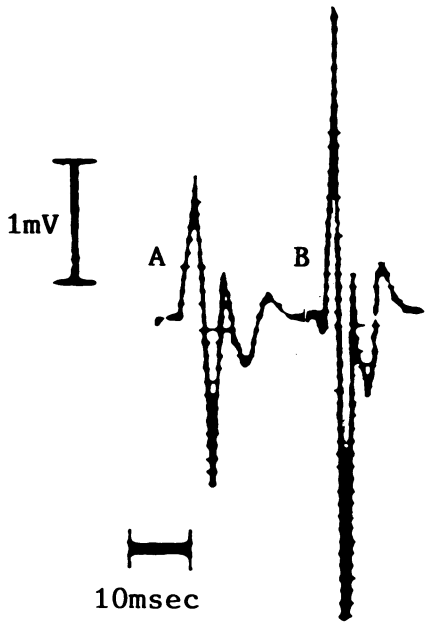

Figure 2 The initial CMAP (indicated by A) and the fifth one (B) to 50 Hertz stimulation in Guillain-Barré syndrome.[1] Instead of marked increase in amplitude, the duration of the fifth CMAP became nearly a half of that of the initial CMAP.

Lambert-Eaton syndrome or botulism, both amplitude and negative area of CMAP greatly increase.

One of the mechanisms of the false facilitation may be a physiological one due to an accumulation of calcium ion,[3] which may increase the amplitude by 10%. A more important factor is an artificial one, a change in spatial relationship of muscle and recording electrodes during testing. The muscle is sometimes very much shortened during tetanic stimulation, particularly when such high frequency stimuli as 30–50 Hertz are applied. The recording area of active electrode may change greatly as soon as the successive short interval shocks are given. This type of error can happen even at low frequency stimulation,[4] if excessive movements are not prevented.

Unfortunately, the facilitation shown by Drs Pullicino and Beck seemed to be a false one, because the increase in amplitude associated with concomitant reduction in duration of successive CMAPs as shown in fig. 2 (made from the original figure published in the journal). The negative area remained unchanged. At low frequency stimulation, they stated, that there was waxing instead of waning, which is an extremely unusual finding for impaired ACh release. We are therefore not convinced about the impaired neuromuscular transmission in GBS. Careful study will be required to confirm if there is true facilitation or not.

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Cost-effective investigations of patients with suspected TIAs

GJ Hankey and CP Warlow, discussed cost-effective investigation of patients with suspected transient ischaemic attacks.[1] The authors claim that the cranial CT scan in suspected TIA patients only allows exclusion of an underlying structural intracranial lesion, which may rarely be present (1%). The authors state that the prognosis of TIA patients with and without lesions on CT is similar.

In my experience the occurrence of structural intracranial lesions is higher than 1%. A personal study showed that cerebral transient attacks due to lacunes, large or medium size infarctions, tumours and haemorrhages reached 30%[2] of suspected TIA cases, and 13·4% of these patients suffered from lacunar infarction.[3] In another report the percentage of lacunar infarction was even higher, reaching 23% of all cerebrovascular diseases.[4] Patients suffering from lacunar infarction do have different prognosis from those with large infarctions and from TIAs without CT lesions.[5] The survival rate of patients with lacunar infarction is 479/1000, slightly higher than that of patients with completed stroke due to large or medium-size infarction, but considerably lower than that of patients with TIA with negative CT scan.[6 7] Therefore, cranial CT scan may modify the prognosis at least in one third of the patients with suspected TIA. Moreover, in some studies[6 7] mortality and morbidity are higher in TIA patients with respect to minor stroke.

In addition, some authors believe that therapy of patients suffering from lacunes is different from therapy of TIA with negative CT findings: TIAs and minor stroke need prophylactic therapy with anti-aggregating agents and careful evaluation for possible surgical therapy.

In conclusion I believe that a CT scan is a necessary test in all patients with suspected TIA and should be regarded as a very cost-effective strategy.

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Hankey and Warlow reply:

Professor Loeb has misinterpreted our distinction between a structural intracranial lesion (for example, a tumour or arteriovenous malformation) and a low density lesion (such as, a presumed infarct) on cranial CT scan. Our editorial indicates that, from the available data, about 1% of patients presenting with suspected TIA, who undergo a CT, have CT evidence of a structural intracranial lesion such as a tumour or AVM. In addition, about 10–30% of patients presenting with TIA (depending on which series you read) have cranial CT scan evidence of a low density lesion, such as a small deep infarct. Some of these hypodensities are clearly not related to the presenting TIA and are therefore asymptomatic (as they are located on the asymptomatic side of the brain) and some may be symptomatic (as they are located on the symptomatic side of the brain).

The key point is that, for TIA patients, the presence of focal hypodensity on CT has not been shown conclusively to be an important independent prognostic factor for subsequent important vascular events such as stroke, myocardial infarction or vascular death. It is therefore not that important to do a CT scan, just to see if a hypodensity is present or not (because it is of no prognostic value). It is, however, clearly important to identify underlying structural lesions such as a tumour, because the prognosis and treatment may be different. As such findings are infrequent (occurring in about 1% of suspected TIA patients), our editorial concludes by recommending further prospective studies of the yield and cost of CT scan in patients with TIA. Of course, if future studies show that the finding of infarction on CT is an important prognostic factor for stroke and other serious vascular events, then there would be greater purpose in performing cranial CT in patients with suspected TIA, and it may prove to be cost effective, as Professor Loeb suggests. At present, however, we do not have that information.

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BOOK REVIEWS

All titles reviewed here are available from the BMJ Bookshop, PO Box 295, London WC1H 9TE. Prices include postage in the United Kingdom and for members of the

British Forces Overseas, but overseas customers should add £2 per item for postage and packing. Payment can be made by cheque in sterling drawn on a United Kingdom bank, or by credit card (Mastercard, Visa or American Express) stating card number, expiratory date, and your full name.

Reoperative Neurosurgery. Edited by J R LITTLE AND I A AWAD. (Pp 379; Price: £103.50). 1992. London, Williams & Wilkins. ISBN 0 683 05080 X.

This beautifully produced little volume has an instantly exciting title. A distressingly large proportion of neurosurgical work consists of re-operative interventions, and as neurosurgery continues to expand to deal with more difficult problems it doesn't seem likely that the necessity for re-operation will diminish. Re-operation is seldom taken as a subject for discussion and many articles and chapters tend to neglect the question of re-operation because of the greater interest in first operations which eliminate the pathology and prevent the need for subsequent procedures.

This book is however some of a *karass*, a collection of things which ought to go well together but somehow don't. The chief reason is the inevitably increasing sub-specialisation in neurosurgery. Failure of temporal lobectomy for residual mesial epileptogenesis would only be of pressing interest to specialist clinics faced with this type of problem. The need to revise shunts in hydrocephalus is of course exceedingly common. It differs but little from the original indications for operation and hardly deserves a separate description except when complicated by such features as slit ventricles and subdural collections. Likewise the recurrence of gliomas is so prevalent and the decisions to re-operate so difficult that they too may be considered as part of the original pathological process. When it comes to indications for re-operation on pineal or pituitary tumours, craniopharyngiomas or spinal tumours then considerations relating to approach and restructuring the objectives may be very different between one tumour and another.

One of the strengths of this book lies in its section on radiology. Also valuable is the radiology discussed in the clinical sections written by surgeons. The section on non neoplastic cervical and lumbar spinal disorders repay careful reading. Re-operative treatment for chronic pain is pretty much the same as operative treatment for chronic pain and the same applies to treatment of arteriovenous malformation. The discussion what to do with failed aneurysm operations is however again well worth study.

The section on syringomyelia does not appeal to this reviewer and is chiefly devoted to consideration of the initial operation rather than dealing with recurrent or residual problem. Only Chiari malformation in association with syringomyelia is addressed whereas the most difficult problems concerned with intracord cystic cavitation are those where repeated operations, particularly repeated placement of various kinds of spinal shunt, have contributed to the formation of intrathecal adhesions. It is a fortunate patient in the United States who escapes placement of shunts into his syrinx and such shunts often block and almost inevitably contribute to meningeal fibrosis with results that may become progressively more dismal as re-operations progress.

The concluding paragraph on legal aspects of re-operative surgery is a thoughtful and thought provoking piece and rounds off this collection of well illustrated and percipient essays which although slightly patchy certainly deserve a place in the library of all those engaged in active clinical practice in our speciality.

B WILLIAMS

Cerebral Palsy: The Child and Young Person (Management of Disability Series). Edited by L COGHER, E SAVAGE AND M F SMITH. (Pp 221; Price: £30.00). 1992. Andover, Chapman & Hall Medical. ISBN 0 412 30900 9.

It is not easy writing books aimed as this one is at audiences with varying degrees of background medical knowledge. As the Preface says it is aimed at a wide readership which will include parents of children with cerebral palsy as well as professionals from health, education and social services. However, when I tried the first two sentences in this book (which used terms such as "central motor deficit" and "non progressive pathologically") on a random selection of six health workers in my developmental assessment centre, none grasped the full sense and two failed to get any sense of the meaning. What I wonder will the parents make of sentences such as "infarction of cerebral tissue in early fetal life resulted in central neuronal and appearance of polymicrogyria presumed secondary to disruption of neuronal migration"?

The first part is the somewhat scientific discussion of the classification, prevalence and aetiology of cerebral palsy. It might have been useful to include a discussion about the findings of epidemiological studies leading on from which the recurrence risks following the uneventful birth of a child with symmetrical motor disorder might have been summarised.

The second and largest part of the book attempts to set the problems facing a child with cerebral palsy against a developmental background. I am afraid I personally found this rather boring. Statements ranged from a crashingly obvious "restricted movement limits or prevents interaction with the environment", to the faintly depressing with an impression of rather spelling out what the child can't or will find difficult to do rather than what the child can do (in this sentence I have carefully avoided any reference to gender—in the book, babies are rather irritatingly female throughout). I found no mention of local or international parent support groups, nor of useful contact addresses of relevant organisations.

I found the section on assessment and therapy the best. Whilst slightly repetitive, there was a useful exposition, borrowing heavily on the work of Mulcahy and Pountney on the development of postural control and measures needed at each developmental stage. Dribble control is not mentioned, nor to grind a personal axe is instrumental gait analysis. Powered chairs get three lines. If this section had been expanded readers would have been left more optimistic about their charges—or more able to ask informed questions where they felt their children were missing out on possible treatment options.

RO ROBINSON

Current Neurosurgery. Edited by G M TEASDALE AND J D MILLER. (Pp 351; Illustrated; Price: £60.00). 1992. Edinburgh, Churchill Livingstone. ISBN 0 443 04447 3.

This nicely produced multi-author publication is principally composed of contributions made by British neurosurgeons and initially contributed to a course on neurosurgery organised by the British Council. The editors run this course and have achieved a high standard. This publication has been carefully written and produced and gives some hope for those of us who feel despair over the deplorable decline in standards of British neurosurgery brought about through the relentless fiscal pressures which continually force our standards downwards relative to the rest of the world.

Many of the sections are excellent. The difficult problems of the management of subarachnoid haemorrhage in relation to the management of non-haemorrhagic deterioration and the timing of operation are discussed in a balanced way. A more authoritative statement of why it is that no one knows what to do with any individual case could hardly be found. There is an excellent section on Doppler sonography which is difficult to follow for someone who has no access to such equipment, and the relevance of transcranial Doppler to subarachnoid haemorrhage is also authoritatively discussed. The review from Jacobson on lumbar spinal stenosis is one of the best I have seen on this subject, not least because he refuses to make the subject simple and points to the many failures likely to be encountered in surgical practice. In commenting on the section on syringomyelia the present reviewer is somewhat handicapped. If he was able to determine whether or not Venn diagrams are really a helpful way of handling large numbers of patients with multiple pathology and protean symptomatology he would be better pleased. If the speculation about filling mechanisms was backed up by a rather more convincing explanation the author might also find his ideas more widely accepted.

The section on glioma biology is almost incomprehensible to a non specialist but the section on treatment of malignant cerebral glioma is well balanced and thoughtful as is the section on the surgical management of neuroma and meningioma.

This book makes no pretence at being comprehensive; to those who attended the course in Edinburgh and Glasgow there are some striking omissions, for example the craniofacial work of Hyde, but it is a well balanced and up to date volume which deserves a place in every neurosurgeon's personal library and should be carefully studied by those going for higher surgical qualifications in these Islands.

B WILLIAMS

Neurology. Series: Colour Guides. By P TREND. (Pp 122; Illustrated; Price: £7.95). 1992. Edinburgh, Churchill Livingstone. ISBN 0 443 03375 7.

Neurology is ideally suited to teaching by illustrations and words. In this booklet, captioned coloured photographs on the right,

chapters by Hermann and his group, examining multiaetiological models of psychosocial dysfunction and psychological assessment of patients with non epileptic seizures. Some data have been published elsewhere; their failure to find associations between polytherapy and phenobarbitone prescription and depression is contrary to some other work in the literature.

Bennett, the overall editor provides a chapter on cognitive aspects of epilepsy and anticonvulsant drugs. Although his phenomenology is awry when discussing distinctions between the hallucinations of an aura and the experiences of schizophrenic patients, his conclusion that anticonvulsant drugs affect cognition and that differences exist between drugs, favouring Carbamazepine and sodium valproate is of relevance to recent debate.

Other chapters cover temporo-limbic epilepsy, a concept to be welcomed, in which the interictal behavioural syndrome is reviewed and given some validity. Oddly, psychosis is not discussed in this context. Mungas, in one of the few chapters providing original data suggests from complex cluster analysis a figure of 21% for those suffering from "the proposed behavioural syndrome". Interestingly, this cluster was interlinked with complex partial seizures, providing further indirect evidence of association between limbic seizures and such behaviour. The other chapters review temporal lobectomy, Wada testing, bio-feedback and corpus callosotomy. They are of variable interest, but the only one containing new data is by Sakin and his colleagues from Philadelphia.

Overall, this book is a worthwhile contribution. But the irritation was driven by the discovery that there was not a single European author on a subject that has its roots in the European literature, going back 150 years. Sour grapes on my behalf perhaps, or ignorance by the editor. I leave others to judge.

MR TRIMBLE

Handbook of Parkinson's Disease/2nd Edition. Revised and Expanded. (Neurological Disease & Therapy Series/13). Edited by WM C KOLLER. (Pp 618; Illustrated; Price: $150.00.) 1992. New York, Marcel Dekker Inc. ISBN 0-8247-8675-0.

This is the revised and expanded second edition of a book first published in 1987. It retains the same chapter headings of the first edition, and many of the same authors. As you might expect junior colleagues of many of the first contributors have been delegated to update the original chapter.

Research in Parkinson's disease appears to be progressing at an amazing pace, yet this book, five years on from the first is not greatly different, and thereby puts in perspective the ever expanding activity of research meetings. Probably the most significant recent discovery is an abnormality in complex one of the mitochondrial respiratory chain. Strangely there is only one short mention of this particular research. Nevertheless the chapter on aetiology by Langston and Tanner remains the most interesting. Yet we still don't know whether Parkinson's disease is an inherited or an acquired disorder, or both. Other chapters too don't indicate a great deal of progress. Levodopa remains the most effective symptomatic treatment of Parkinson's disease. Brain implants remain an experimental procedure; even the most optimistic appraisal of implantation indicates that only a minute number of patients will benefit from them. Many of the symptoms resist all treatment, and ten years from the diagnosis many patients are profoundly disabled. Thus it is pleasing to see that psychosocial aspects and the rehabilitation approach are not neglected here.

This book covers all aspects of Parkinson's Disease and is the best general text on the topic. However, if you already own the first edition there may be not a lot of point buying the second.

CHRIS CLOUGH

Electroconvulsive Therapy/2nd edition. By RICHARD ABRAMS. (Pp 340; Price £35.00.) 1992. Oxford University Press. ISBN 0-19-507057-7.

Perhaps uniquely among physical treatments used in psychiatry, electroconvulsive therapy (ECT) continues to excite controversy, with passionate advocates and equally passionate detractors. The public perception of ECT is coloured by horror stories and popular fiction based on practices that are depicted as cavalier, cruel and causative of brain damage. Richard Abrams's text is thus a comprehensive and apposite account of the subject. Abrams practises in Chicago, is well known to *aficionados* of ECT as a prolific author on, and advocate of, the treatment. The first edition of 1988 made a considerable impression, and it shows the interest in the field that a new edition, produced only four years later, should refer to so much more contemporary work.

It begins with a brief historical account of convulsive therapies and continues with a useful review of studies of the efficacy of ECT. There seems little doubt that genuine ECT is superior to sham ECT in the treatment of depression, but the advantage of ECT over adequate doses of antidepressant drugs is less clear. Abrams is very open about the methodological problems that bedevil some studies, and points out the importance of prospective studies. He also makes the rather curious, but not necessarily inadmissible, point that anecdotal clinical experience and the "cumulative wisdom of teachers and colleagues", as he terms it, may have just as much relevance as the controlled study in the evaluation and use of ECT. The next section deals with clinical pointers to successful outcome of the treatment. There is not much that is new here; the presence of psychomotor retardation, stupor and psychotic, mood-congruent delusions provides the best prediction of success, while a more 'neurotic' presentation does not. Further chapters deal with the physiological changes during and after ECT, and the risk associated with ECT.

The core of the book is concerned with practical aspects of ECT. Abrams makes the case for preferring unilateral administration of ECT to the non-dominant cerebral hemisphere to bilateral administration, although the latter is appropriate if the former is ineffective. This recommendation is exactly contrary to that made by the Royal College of Psychiatrists. However, all are agreed that bilateral ECT is followed by more severe memory disturbance than unilateral non-dominant ECT.

The remainder of the book consists of protocols for the administration of ECT, discussions of consent and some fascinating advice about medico-legal issues.

This book represents the views of an unabashed advocate of ECT. It is not too much of a caricature of Abrams's argument to suggest that he presents ECT as something of panacea, which should be offered to a very much wider range of patients than is customary in the United Kingdom. Nevertheless, the book is balanced, and difficult questions are not shirked.

MT ISSAC

SHORT NOTICES

Experimental Approaches to Anxiety and Depression. (Biological Council Symposium on Drug Action. *Edited by* J MARTIN ELLIOTT, DAVID J HEAL AND CHARLES A MARSDEN. (Pp 272; Illustrated; Price: £55.00.) 1992. Chichester, J Wiley & Sons Ltd. ISBN 0-471-93096-2.

World Health Forum: An International Journal of Health Development. Vol. 13, No. 2/3, 1992. (Pp 276; Annual subscription Sw.fr 68.-.) 1992. GENEVA, WORLD HEALTH ORGANISATION. IX ISSN 0251 2432.

Treatment of Dementias: A New Generation of Progress. Series: Advances in Behavioral Biology Vol. 40. *Edited by* E M MEYER, J W SIMPKINS, J YAMAMOTO AND F T CREWS. (Pp 533; Price: $115.00.) 1992. New York, Plenum Publishing Corp. ISBN 0-306-44228-0.

Neurology for the Psychiatry Speciality Board Review. (Brunner/Mazel Continuing Education in Psychiatry Series No. 2). By LEON A WEISBERG, MD. Series Editor: Gene Usdin, MD.(Pp 129; Price: $27.50.) 1992. New York, Raven Press. ISBN 0-87630-684-9.

NOTICES

Eighth Wye College Neuropathology Symposium: 5–9 July 1993. Designed for neuroscientists, neuropathologists, neurologists and neurosurgeons the programme highlights important areas of recent developments. Course fee of £110 includes full board and lodging for 5 days. Details from: Dr W Gibb, Dept of Neurology, Institute of Psychiatry, De Crespigny Park, London SE5 8AF Tel: 071 703 5411.

The VIII International Congress on Neuromuscular Diseases, Japan
The VIII International Congress on Neuromuscular Diseases will be held on 10–15 July 1994, Kyoto, Japan. The programme will focus on new developments in morphology, electrophysiology, immunology, genetics and treatment. For further information contact: The Secretariat, Intermedd Inc, 4-8-11-306 Tananawa, Minato-Ku, Tokyo 108, Japan. (Telephone: 81-3-3444-5371; Fax: 81-3-3444-5580).