Apomorphine as an alternative to sildenafil in Parkinson’s disease

I was interested in the recent paper by Hussain et al describing the efficacy of sildenafil citrate for erectile dysfunction in patients with Parkinson’s disease or multiple system atrophy (MSA). Their findings provide reassurance that this popular drug is both effective and safe in parkinsonian patients provided orthostatic hypotension is recognised as a potential side effect in MSA. Sildenafil inhibits cyclic GMP specific phosphodiesterase thereby enhancing nitric oxide mediated relaxation of the corpus cavernosum. The authors do not mention any effects of sildenafil on parkinsonian symptoms, although its mechanism of action would make this unlikely.

In addition to erectile dysfunction, many factors including motor symptoms contribute to sexual dysfunction and dissatisfaction in this population and have previously reported penile erections in a significant proportion of patients following subcutaneous injections of the dopamine agonist apomorphine to treat motor fluctuations in Parkinson’s disease.

Some of these patients started using intermittent apomorphine injections specifically for erectile dysfunction. In contrast to sildenafil, dopamine agonists act centrally on dopamine receptors in the paraventricular nucleus of the hypothalamus to stimulate oxytocin release. The benefit to motor symptoms in Parkinson’s disease is mediated through dopamine receptors in the striatum. Apomorphine also benefits motor disabilities in some patients with MSA although orthostatic hypotension may be exacerbated by stimulation of peripheral dopamine receptors and its role in erectile dysfunction in this group has not been explored.

In view of the additional benefits to parkinsonian motor symptoms, subcutaneous apomorphine should be regarded as an alternate to sildenafil in treating patients with Parkinson’s disease and erectile dysfunction. Sublingual preparations of apomorphine have recently been developed for this indication.

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References
demonstrated people. Practical psychiatry of old age, noted in its 3rd edition, brings together the many fields of our discipline. It is liberally scattered with useful and interesting case histories and the advice on management is sound and up to date.

The book is clearly written for a trainee and non-specialist audience and deals with most subjects with a fairly light touch. The references at the end of the chapters serve as useful reading lists, including as they do both recent and historical papers. For students and for trainees this book will provide a useful revision and summary aid although trainees will need also to have hand some of the wealth of information in other disciplines. In other disciplines you may well find the book helpful to understand some of the classification and nomenclature issues of old age psychiatry.

Like the discipline itself, however, this book is very much a British affair. The sections on services have only limited international relevance and even the concept of a doctor who manages late onset psychosis, personality disorders and dementia is not so common elsewhere. The concentration on the international classification of diseases has limited application in the United States. So for international classification of diseases has limited application in the United States. So the American Classification of Diseases has limited application in the United States.

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This is a welcome addition to the literature. The book has been published with the help and support of the British Geriatrics Society special interest group on Parkinson's Disease and the Parkinson's Disease Society of the United Kingdom. Both organisations have been at the forefront of increasing public and professional awareness of the need for a holistic approach to the care of older people with this condition.

Understanding of the pathophysiology, therapeutics, and progression of the disease, as well care. His paradigm for Parkinson's disease management is used by many geriatricians and is described it in greater detail for neurologists to... p 899).

As for content, there are a few lapses. In particular, discussion of the pathophysiology of symptoms and signs lacks depth: Hughlings Jackson would have baulked at the definition of positive symptoms given on p 13. With a book of this size, there is some variation in quality and the chapter on vasculitis and collagen vascular disorders is weaker than the rest. Though these conditions are relatively rare, their management is important, as it frequently vexes neurologists. It is simply inadequate to dismiss their classification as unsatisfactory and end the brief discussion of this topic with the implication that they can all be lumped together anyway, as the treatment is usually unsatisfactory. In the same section, lupus and the anti-phospholipid syndrome are given as examples of the difficulty of accurate subclassification. But this is one situation where there are clearly definable differences in treatment—that is, immunosuppression versus antiplatelet therapy and/or anticoagulation. Later in the same chapter, cosinophilia is given as a feature of Wegener's granulomatosis yet is more commonly described as a feature of Churg-Strauss syndrome. Consistent nomenclature is always a concern in large multi-authored texts. Here, there are predictable difficulties with the hereditary neuropathies and with what to call idiopathic brachial plexopathy—the author lumping for the rather antiquated “acute brachial neuritis”. It is a pity that the one disease for which the British can claim special expertise—the human
form of bovine spongiform encephalopathy—given under two names, “variant Creutzfeldt-Jakob disease” in the section on dementia and “new variant Creutzfeldt-Jakob disease” in that on infection.

There are typographical errors, which are too many for comfort, especially in the tables, figures, and references, giving the impression that the book was rushed in its final production stages. Perhaps the most alarming were the symptoms of a new cranial nerve, the 13th, in table 1.4. Figure 8.5 shows a retinal hamartoma, not haematoma. Figure 8.4 shows the optic fundus at an unusual angle. Figure 11.9 is anatomically incorrect. Figures 11.10, 11.11, and 11.12 are too small. The caption to figure 2.23 is incomprehensible. Many other examples could be given.

But these are mainly minor quibbles, easily rectified when the book is reprinted. Taken as a whole, Big Brain is alive and well, and safe in its strength. The complete range of neuropsychiatric diagnoses. The problem with such an approach is that it leads to duplication. In the first half any single diagnosis has to appear as many times as its symptoms, signs, and syndromes. For example lists are provided for causes of dementia lacking distinctive features, dementia with Lewy bodies, dementia with frontal lobe syndrome or with Parkinsonism. Confronted with a patient with dementia plus parkinsonism the reader has then to go to the second half of the book where the approach depends heavily on the validity of the classification of symptoms and syndromes; conditions with different names often seem to share more in common than sets them apart. For example it is asserted that stupor can be distinguished from coma, but its influence on the whole of neuropsychiatric disease is immense and still continues. His book soon became a classic—the two editions he wrote were not long enough to be acquired only with difficulty from antiquarian booksellers. Over the years it has become slowly transformed, though perhaps some intermediate editions were an interesting factory hybrid between the master and later developments. “Wolff’s Headache” has now emerged as a fully fledged multiauthor text in its own right, but with less emphasis on the discovery of the single author’s experimental work. We now have a 600 page authoritative book, written largely by American authors, all clearly experienced clinicians. It is comprehensive but not more manageable than its main competitors.

In the first 100 pages the classification, anatomy, pathophysiology, genetics, and epidemiology of headache is reviewed, with discussion of imaging techniques and comorbidity with other diseases. The core of the book covers migraine, cluster headache, tension headache, including a very comprehensive review of every drug that has ever been used to treat headache, including the obscure, the ineffective, and the promising. This section is also strong on the classification of chronic headache syndromes and in discussing analgesic abuse. The third section discusses every conceivable structural cause of headache, including low CSF pressure, metabolic disease, and disorders of the neck, eyes, teeth, nose, and blood vessels, including all the classic citations. The final three chapters discuss headache in children, behavioral management, and the consultation process itself.

This is an outstanding book; little of significance is omitted, and yet one is not overwhelmed with details. No doubt with the trainee entering the field in mind, it is particularly good when reviewing the literature, though some authors do occasionally lapse into the vocabulary of older papers. It will prove to be a useful reference text for more senior neurologists confronted with a difficult patient, both for diagnostic and therapeutic options, thought these are perhaps more from an American viewpoint.

It is a very comprehensive textbook. This is its strength. The complete range of neuropsychiatric conditions is described in a consistent, easy to read, format. Large numbers of up to date references are provided.

Overall Dr Moore is to be congratulated on producing a useful textbook. Two neuropsychiatric colleagues gave this book the thumbs up because Moore has achieved his aim of offering a ready reference for established practitioners. It will be of interest to both neurologists and psychiatrists.

Simon Fleminger

Wolf’s Headache and Other Head Pain, 7th edn.

There can be few people still alive who came under the direct influence of Harold G Wolff before his death in 1996 (Donna Daelessio being one), but his influence on the whole of neuropsychiatric disease is immense and still continues. His book soon became a classic—the two editions he wrote were not long enough to be acquired only with difficulty from antiquarian booksellers. Over the years it has become slowly transformed, though perhaps some intermediate editions were an interesting factory hybrid between the master and later developments. “Wolff’s Headache” has now emerged as a fully fledged multiauthor text in its own right, but with less emphasis on the discovery of the single author’s experimental work. We now have a 600 page authoritative book, written largely by American authors, all clearly experienced clinicians. It is comprehensive but not more manageable than its main competitors.

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Richard Peatfield

Multiple sclerosis: Tissue destruction and repair

The Martin Dunitz imprint produces high quality books with catchy titles often built around European congresses of neurology. Disease: therapeutic strategies and repair emerged from the European Neurology Soci- ety meeting in Jerusalem (2000). Multiple sclerosis: tissue destruction and repair is the proceeding of the joint meeting of ECTRIMS (European and American Commit- tees for Treatment and Research in Multiple Sclerosis) held in Basel in 1999. Looked at critically, neither book is much about repair. Here, the 116 contributors to 3 books edited by a team from Switzerland and Balti- more write on central nervous system-tissue-immune interactions; and in vivo assessment of tissue destruction and its consequences; multiple sclerosis fatigue; new immunological concepts and their therapeutic consequences; treatment of relapse; modern concepts of therapeutic immunomodulation; and an update on therapeutic trials. Many of the usual suspects are rounded up; magnetic resonance surrogates for various histological compo- nents of the disease process in multiple sclerosis; markers of demyelination in body fluids; treatment effects of interferon beta and its mechanisms of action; and strategies for transplantation in multiple sclerosis. Some authors take up old controversies; the use of steroids in acute episodes; and disease modi- fying effects of non-specific immunomunosuppres- sants. But there are also some new or emerg- ing stories: inflammation and neuronal activity, interactions between immune mediators and growth promoting molecules; fMRI evidence for plasticity in multiple sclerosis; T helper and T regulatory activity; bone marrow transplantation in multiple sclerosis; prophylactic treatment of purpueural disease activity with intravenous immuno- globulin; and a brace of preliminary clinical trials with hitherto unknown agents offering things to watch. Multiple sclerosis: tissue destruction and repair succeeds as a statement from experts on where selected aspects of research stood in 1999 and as testimony to the deserved and sustained success of ECTRIMS (and ACTRIMS) but as a last statement on limiting and repairing the damage in multiple sclerosis, perhaps less so.

Katrina Dedman

Current management in child neurology, 2nd edn

Management includes assessment, diagnosis, and treatment. What emerges therefore is a book of clinical paediatric neurology—not a book on treatment in paediatric neurology. It is divided into outpatient and inpatient conditions and priority within these areas is appointed by incidence. The top four out- patient neurological conditions presenting to paediatricians in Florida are attention deficit hyperactivity disorder (ADHD), seizures and epilepsy, developmental delay, and headache. The top four discharge diagnoses from hospi- tal on the other hand are enteroviral meningi- tis, epilepsy, hyperkinetic syndrome (which the author explains by the presence of comorbid conditions requiring hospital treatment), and concussion.

The aim of this book is to provide “primary care physicians, neurologists and house staff with factual information on how to treat children with the most common disorders of the cerebral system”.

There are some surprising omissions in- cluding spinal dysraphism. Movement disor- ders generally get short shrift. Of the 550
pages, cerebral palsy gets five (biomechanics gets five lines, prevention of secondary deformity is ignored), although there are a further eight on spasticity. There is nothing on chorea or dystonic syndromes—the latter omission is particularly surprising in view of the treatment implications.

In these days of economic scrutiny the evidence base for treatment recommendations should be referenced but is not for cerebral palsy, language disorders, or learning disability.

One hundred and nine authors contributed to this book. That so many have been induced to contribute may be because few provide more than seven pages. Thus, the most extensively treated topic is that of epilepsy with 86 pages from 13 separate authors. This leads to redundancy (treatment with antiepileptic drugs in most chapters but especially those on first choice antiepileptic drugs and recurrent seizures) and surprising omissions. A diagnostic approach to Lennox-Gastaut syndrome and progressive myoclonic epilepsies would have been useful. Nowhere are the implications of the genetics of familial epilepsies described. Genetic counselling generally is mentioned only in the chapters on neurofibromatosis and tuberous sclerosis. The concept of channelopathies is absent throughout.

The target audience for this book see a lot of the American paediatric neurologist area of practice is outlined in the chapter “Is my child ready for school?” (by which is meant for normal school since all American children are entitled to education). At the end of four pages, which include a list 14 tests—seven of which require special training and at least five of which seem specifically designed to address the question—it is concluded that “the paediatrician or family physician can assess school readiness using a thorough, careful medical history and physical examination”.

In contrast there are five pages on inborn areas of metabolism and eight on neurodegenerative disorders. Both tend to give lists of conditions but not the screening tests including DNA analysis for those conditions. Statements such as the value of increased cerebrospinal fluid lactate are of limited value unless normal concentrations are given. Curiously phenylketonuria is not mentioned. Half a page is given to treatment of inborn errors. Enzyme replacement is not mentioned under the neurodegenerative conditions. While these conditions are individually rare, their collective burden is considerable. Many, particularly the inborn errors, are both treatable and susceptible to prenatal diagnosis. Similar comments may be made for the hereditary neuropathies (eight pages) and muscular dystrophies and myopathies (eight pages). Muscle histology gets five lines.

Prominent also is ADHD with 26 pages and five authors, reflecting the American referral patterns described above. Another curious (to the European paediatric neurologist) area of practice is outlined in the chapter “Is my child for school?”—by which is meant for normal school since all American children are entitled to education. At the end of four pages, which include a list 14 tests—seven of which require special training and at least five of which seem specifically designed to address the question—it is concluded that “the paediatrician or family physician can assess school readiness using a thorough, careful medical history and physical examination”.

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Richard O Robinson
