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3 Green PE, Rao VR. Conjoint measurement for quantifying judgmental data. *Journal of Marketing Research* 1971;8:355–63.
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Motor neuron disease

We thank Leigh and Ray-Chaudhuri[1] for a diligent update on motor neuron disease (MND). The Mexican impression of MND resistance (page 890) may be a problem of access to diagnosis and a very young population pyramid. For patients who refuse percutaneous endoscopic gastrostomy (PEG) the authors recommend oral morphine elixir, because it "relieves hunger and thirst to some extent, and may avoid the need for a nasogastric tube". Here we underline that radiopaque polyurethane or silicon nasal tubes can be applied easily even in sensitive patients when deep-frozen before use to stiffen the tube walls. They can be complemented with an individual rubber oliva at the entry of the nose. Morphine may be useful for dyspnoea or unrest, but should *not* be a substitute for feeding. In our own series of 30 patients with ALS/MND, a PEG tube has always been well tolerated. It is invisible if not needed. It is contraindicated only in cases of ascites or peritonitis or if abdominal walls are impermeable to the diaphanoscopic light. Percutaneous endoscopic gastrostomy is a permanent solution and a small procedure, and does not impair speech or respiration. In our experience, wound healing and epidermal immune functions are unaffected in patients with ALS/MND, and we have not encountered a single patient out of the last 62 who was ineligible for *both* nasal and PEG tube.

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1 Leigh PN, Ray-Chaudhuri K. Motor neuron disease. *J Neurol Neurosurg Psychiatry* 1994; 57:886–96.

Leigh and Ray-Chaudhuri reply:
The comments of Westarp and Kornhuber are helpful, and in principle we agree with them.

We were not suggesting that oral morphine should substitute for adequate feeding, and percutaneous endoscopic gastrostomy (PEG) is clearly the method of choice whenever possible. Nevertheless, there are a few patients in whom PEG is either not practicable or is refused, and who prefer not to have a nasogastric tube. This may only be for a few days towards the end of life. These patients should certainly be hydrated as well as possible, but the decision as to the most humane way to do this should be made (if possible) in joint discussion with the patient, the carers, and the physicians.

Oral morphine can, however, be helpful in relieving distress due both to ventilatory insufficiency and hunger when patients choose a palliative rather than a more active approach to the management of their disease.

In summary, we are not suggesting that morphine should be used as a long term substitute for adequate hydration and feeding, and we entirely endorse the use of PEG wherever possible. Our policy is to avoid a nasogastric tube whenever possible, but we agree that sometimes it may be necessary to resort to this.

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NOTICE

Progressive supranuclear palsy (PSP Europe) association

A small group of patients with progressive supranuclear palsy (PSP or Steele-Richardson-Olszewski syndrome as it is sometimes known) have banded together to promote research into this little known but debilitating illness and see that it receives more attention from the public and Members of Parliament. We believeat as an organised group we can persuade government and donor trusts to allocate needed funds. Dr AJ Lees is chairman of our medical advisory panel.

Would neurologists please pass this information on to their patients and ask them to write to the PSP Association, 21 Church Street, Mears Askby, Northampton NN6 0DN.

MICHAEL KOE

BOOK REVIEWS

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The Neurobehavioural Treatment of Epilepsy. Edited by D I MOSTOFSKY and Y LOYNING. Publishers: Lawrence Erlbaum Associates, New Jersey 1993. (Pp 350; £46·95). ISBN 0–8058–1106–0.

Observations for centuries have revealed that patients with seizure disorders can sometimes control them by non-drug means, the example cited in the preface being the technique of limb ligation to arrest seizures, advocated, for example, by Gowers. Such "feed back" techniques became popular in the 1960s and 1970s for a variety of conditions, and epilepsy became included. There was a flurry of reports, including some from the author of the first chapter in the book, Sterman, suggesting, for example, that certain cerebral rhythms could be enhanced by operant conditioning, which would have an effect on seizures. This essentially is the starting point for a number of chapters in this book, which have to do with non-medical aspects of seizure disorders, and their treatment by behavioural means.

However, the title of this book is somewhat misleading; thus it implies that it is going to be about treatment of epilepsy, using neurobehavioural techniques, although what precisely is encompassed by that is never exactly explained. The preface goes on to state that the purpose of the volume is to "sketch a broad picture of some of the non-drug and non-surgical treatment strategies" of epilepsy, which, of course, broadens the concept considerably from "neurobehavioural".

The most appropriate chapters to suit the title are those from Sterman on sensory motor feedback, and that by Mostofsky himself on behaviour modification. Others, however, soon stray. Thus, there is a chapter on breathing training, and the relationship of breathing to seizures, and a chapter on exercise in epilepsy; the rest of the chapters move away from treatment almost altogether. There is an extremely interesting neuro-biological exploration of neuroactive steroids in epilepsy, and good review chapters on catamenial epilepsy, and nutrients in epilepsy. Other chapters include broader psychosocial issues, for example, on the role of community agencies in the comprehensive treatment of epilepsy by Berner, and the assessment of psychosocial and emotional factors in epilepsy, covered by Dodrill and Batzel. The chapter on psychogenic seizures, while a worthy review, sits uncomfortably with the overall theme of the book.

This book is perhaps better viewed as a compilation of interesting essays on some aspects of epilepsy not usually covered in other books. Unfortunately, those chapters dealing with treatment, often promise more than they can deliver. Thus, a number contain loosely reported uncontrolled trials, with imprecise outcome data hinting at, but not demonstrating, some improvement in some seizures types in some patients.

Although it may be suggested that neurobehavioural treatments in epilepsy have not been given their full due, because of the overabundance of research funds that goes to biological mechanisms and drug treatments, a book such as this always leaves the reader wondering. Essentially, if these techniques are so good, surely they would have been adopted by a broader church, and used more in the management of epilepsy which has become difficult to control by any other means. The book may form a stimulus for further research, but it will hardly stimulate me to blow the dust off my old biofeedback machine.

MICHAEL TRIMBLE