

# PostScript

## CORRESPONDENCE

### Apomorphine as an alternative to sildenafil in Parkinson's disease

I was interested in the recent paper by Hussain *et al*<sup>1</sup> 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. I 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.<sup>2</sup> 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.<sup>3</sup> 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 alternative to sildenafil in treating patients with Parkinson's disease and erectile dysfunction. Sublingual preparations of apomorphine have recently been developed for this indication.<sup>4</sup>

J D O'Sullivan

Department of Neurology, Level 7, Ned Hanlon Building, Royal Brisbane Hospital, Herston Road, Herston, QLD 4121, Australia

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### Conflict of intentions or inner negativism?

In a recent, fascinating article, Nishikawa *et al*<sup>1</sup> describe their encounter with "three patients with callosal lesions who sometimes could not perform whole body actions as they intended because another intention emerged in competition with the original one." Believing that "no specific term has yet been coined for this symptom," they "tentatively" named it "conflict of intentions."

In fact, however, this symptom was described by Bleuler in his *Textbook of psychiatry*, which first appeared in English translation in 1924. Bleuler termed it "inner negativism," and noted that when "patients make an effort to start an action . . . a counter-impulse, or only a mere blocking appears and hinders them in its execution." Such inner negativism could prevent "the simplest acts like eating. The spoon is arrested half way up to the mouth and must finally be put down again."

The great service of Nishikawa *et al* is to demonstrate the localising value of this symptom to the corpus callosum; it would be a disservice to medical history, however, to rename it.

D P Moore

Department of Psychiatry and Behavioural Sciences, University of Louisville School of Medicine, c/o Central Hospital, La Grange Road, Louisville, KY 40223, USA; dpmooremd@cs.com

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#### Author's reply

We are very grateful for Dr Moore's interest and comments on our article. We believe that the value of our study lies, firstly, in having rediscovered the significance of a symptom in some cases of partial callosal disconnection. The literature has been largely silent about this except for a few episodic descriptions in case reports. Secondly, we link it to the so called callosal disconnection syndromes by clarifying its clinical features and discussing possible pathogenic mechanisms. We gave the symptom a new label—"conflict of intentions"—because it differs from any other callosal symptoms and cannot be explained by established disconnection theories, given that this symptom manifests itself without being confined to one half of the body.

Dr Moore comments that the symptom we reported has already been described in Eugen Bleuler's classic textbook and termed "inner negativism" ("innerer Negativismus" in the original). He asserts that assigning new terminology to an essentially identical symptom would be a disservice to medical history. We disagree.

We consider that the terminology used in descriptive symptomatological studies is conceptually different from that used in studies that take into account both phenomenology and pathogenesis. In Bleuler's textbook, "inner negativism" appeared in the chapters about general descriptive symptomatology and schizophrenia. Our "conflict of intentions", on

the other hand, is a purely neuropsychological term meant to denote a particular type of callosal disconnection syndrome. We hypothesise links between psychopathological phenomena and underlying pathogenic neural mechanisms. In other words, we do not intend to equate the neuropsychological term "conflict of intentions" with the purely descriptive term "inner negativism."

We agree that the symptom described by Bleuler has much in common with that seen in our patients. Indeed, we hope that our speculations about the conflict of intentions will help to elucidate the neural mechanisms of some well known psychiatric symptoms such as ego disturbances in schizophrenia, and ego dystonic experiences in obsessive compulsive disorders. In the future, these symptoms may be explained in terms of the dynamics among intentional, responsive, and automatic factors in behaviour, or among their respective main neural substrates—that is, the left and right cerebral hemispheres and lower neural systems—which we assume to be elements for explaining general human behaviour. Until such a unifying theory is established, we think it may not be such a disservice to medical history to preserve a distinction between the developmental processes of descriptive psychiatry and neuropsychology by retaining both terms, Bleuler's "inner negativism" and our "conflict of intentions".

T Nishikawa, I Mizuta, M Takeda

Department of Clinical Neuroscience and Psychiatry, Osaka University Graduate School of Medicine, Osaka, Japan

J Okuda

Department of Psychiatry, Shoraiso National Hospital, Nara, Japan

Correspondence to: Dr Nishikawa, Department of Clinical Neuroscience and Psychiatry, Osaka University Graduate School of Medicine, D3, 2-2 Yamadaoka, Suita City, Osaka 565-0871, Japan; nishikawa@psy.med.osaka-u.ac.jp

## BOOK REVIEWS

### Practical psychiatry of old age, 3rd edn

Edited by J P Wattis, S Curran (Pp 268, £24.95). Published by Radcliffe Medical Press Ltd, Abingdon, 2001. ISBN 1857752457

It is a curious thing that old age psychiatry is such a geographically weak discipline. There are many and excellent old age psychiatrists in Australia and Norway. The UK is arguably the home of old age psychiatry and the discipline is well established in the United States. However, in most European countries, let alone further afield, old age psychiatry as a discipline either doesn't exist or is limited in scope.

This is a shame, as amply shown by this book. The argument in favour of old age psychiatry is well presented by Wattis and Curran. It is discipline that is at home with physical disease as much as what used to be called functional disorders; a discipline that is perhaps the most comfortable with multidisciplinary working; a discipline that can move in the course of a day's clinical work from molecular genetics to psychotherapy with