

## Editorial Committee

CD MARSDEN (*Editor*)  
CBT ADAMS  
JP BALLANTYNE  
MR BOND  
A CROCKARD  
LW DUCHEN  
MJG HARRISON  
RAC HUGHES  
PG JENNER  
DPE KINGSLEY

PL LANTOS  
JC MEADOWS  
B NEVILLE  
C PALLIS  
G PAMPIGLIONE  
JD PARKES  
J PAYAN  
JMS PEARCE  
J PICKARD  
PF PRIOR

A RICHENS  
T SHALLICE  
JOHN A SIMPSON  
MICHAEL SWASH  
G TEASDALE  
M TRIMBLE  
E WARRINGTON  
EDITOR *British Medical Journal*  
Technical Editor: KENNETH TILL

THE EDITORIAL COMMITTEE welcomes original papers, which should be addressed to the Editor, Journal of Neurology, Neurosurgery, and Psychiatry, BMA House, Tavistock Square, London WC1H 9JR. Papers are accepted on the understanding that the subject matter has not been and will not be published in any other journal. Papers should deal with original matter and the discussion should be closely relevant to this. Manuscripts should be typewritten in double spacing on one side of the paper only. Two copies (including figures and tables) should be submitted of which only one need be a top copy. A summary of about 50 words should appear at the beginning of each paper. The name(s) of the hospital or laboratory should also appear. Full postal address for correspondence and reprints should be supplied. Receipt of manuscripts will be acknowledged.

The Editor will welcome Short Reports or Preliminary Communications limited to about 1000 words and with no more than one figure and one table. Also welcome are Letters to the Editor.

**ETHICS** Ethical considerations will be taken into account in the assessment of papers (see the Medical Research Council's publications on the ethics of human experimentation, and the World Medical Association's code of ethics, known as the Declaration of Helsinki (see *British Medical Journal* 1964;2:177)).

**ABBREVIATIONS** Measurements should be expressed in SI units (see *Journal of Clinical Pathology* 1974;27:590-7; *British Medical Journal* 1974;4:490; *International System of Units* 1972. National Bureau of Standards, Special Publication 330. United States Bureau of Printing: Washington). For recognised abbreviations see *Journal of Neurology, Neurosurgery, and Psychiatry* 1975;38:5; and *Units, Symbols and Abbreviations*, Third Edition 1977, edited by DN Baron, Royal Society of Medicine: London.

**ILLUSTRATIONS** *Photographs* Unmounted photographs on glossy paper should be provided together with magnification scales when appropriate. *Diagrams* will be reduced to 2¾ inches (68 mm) wide, occasionally to 5¾ inches (145 mm). Lettering should be in either Letraset or stencil and care should be taken that lettering and symbols are of comparable size. Illustrations should not be inserted in the text. They should be marked on the back with figure numbers, title of paper, and name of author. All photographs, graphs and diagrams should be referred to as figures and should be numbered consecutively in the text in Arabic numerals. The legends for illustrations should be typed on a separate sheet. *Tables* should be numbered consecutively in the text in Arabic numerals and each typed on a separate sheet. The format used in this issue of the Journal should be noted. Vertical lines will not be printed and usually there are only three horizontal lines in each table.

REFERENCES should be in the Vancouver style as in this issue. They should appear in the text by number only in the order in which they occur and should be listed on a separate sheet in the same order. Punctuation must be correct and journal titles should be in full or abbreviated in accordance with the *Index Medicus*. Thus:

Millikan CH, Eaton LH. Clinical evaluation of ACTH and cortisone in myasthenia gravis. *Neurology (Minneapolis)* 1951;1:145-52.

Penn AS. Immunological features of myasthenia gravis. In: Aguayo AJ, Karpati G, eds. *Topics in Nerve and Muscle Research*. Amsterdam: *Excerpta Medica* 1975:123-32.

Coers C, Woolf AL. *The innervation of muscle. A biopsy study*. Oxford: Blackwell, 1951:16-24.

A reference to unpublished work should not appear in the list but work "in press" may be included provided the name of the journal appears. The author is responsible for the accuracy of references.

**REPRINTS** Twenty-five reprints will be supplied free of charge. Additional reprints are available at cost if they are ordered when the proof is returned.

**CORRECTIONS** other than printer's errors may be charged to the author.

**COPYRIGHT** © 1984 by JOURNAL OF NEUROLOGY, NEUROSURGERY, AND PSYCHIATRY. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means—electronic, mechanical, photocopying, recording, or otherwise—without the prior permission of the Journal of Neurology, Neurosurgery, and Psychiatry.

**NOTICE TO ADVERTISERS** Applications for advertisement space and rates should be addressed to the Advertisement Manager, JOURNAL OF NEUROLOGY, NEUROSURGERY, AND PSYCHIATRY, BMA House, Tavistock Square, London WC1H 9JR.

**NOTICE TO SUBSCRIBERS** The Journal is published monthly. The annual subscription rate is £47 in the United Kingdom and Republic of Ireland, and US \$115 in all countries overseas. Payments for overseas subscriptions should be made in US dollars, or in other currency based on the prevailing exchange rate to the US dollar of that currency payable to the British Medical Association and addressed to the Subscription Manager, Journal of Neurology, Neurosurgery, and Psychiatry, BMA House, Tavistock Square, London WC1H 9JR. Orders can also be placed locally through any leading subscription agent or bookseller. (For the convenience of readers in the USA subscription orders, with or without payment, can also be sent to: British Medical Journal, Box 560B, Kennebunkport, Maine 04046, USA. All enquiries, however, must be addressed to the Publisher in London).

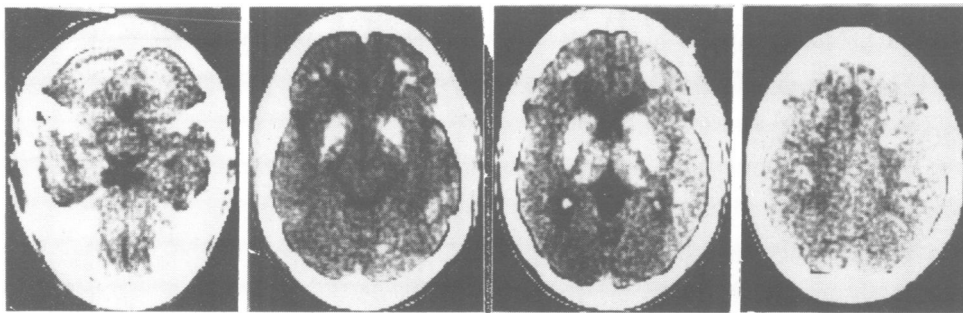


Fig. CT scan without contrast: calcification of basal ganglia, frontal, parietal and occipital lobes and cerebellum is seen on both sides.

- <sup>2</sup> Albright F, Burnett PH, Smith CH, Parson W. Pseudohypoparathyroidism—an example of "Seabright-Bantam syndrome". *Endocrinology* 1942;**30**:922-32.
- <sup>3</sup> Spiegel AM, Levine MA, Marx SJ, Aurbach GD. Pseudohypoparathyroidism: The molecular basis for hormone resistance—a retrospective. *N Engl J Med* 1982;**307**:679-81.
- <sup>4</sup> Kaiserman D, Liegler D, Amorosi ED. CAT scan in hypoparathyroidism. *Ann Neurol* 1977;**2**:249-50.
- <sup>5</sup> Valentine AR, Pullicino P, Bannan E. eds. *A Practical Introduction to Cranial CT*. London: Heinemann, 1981.

Accepted 14 October 1983

### Chorea in digoxin toxicity

Sir: The central nervous system manifestations of digoxin intoxication include visual disturbances, delirium and seizures, but there have been no previous reports of the occurrence of chorea with digoxin toxicity.<sup>1,2</sup>

A 76-year-old woman was admitted to hospital with atrial fibrillation and congestive cardiac failure. She was treated with digoxin and diuretics, eventually being discharged on digoxin 0.25 mg daily. Four weeks after the onset of digoxin therapy, she developed nausea and vomiting together with the progressive onset of choreic movements in the face, the left arm and the left leg. These movements increased and when the patient was reviewed in the clinic two weeks later her plasma digoxin level was 4.2 nmol/l (therapeutic range: 1.2-2.6 nmol/l). The patient had not received neuroleptic drugs and there was no past history of rheumatic fever or chorea. The packed cell volume, urea, electrolytes, liver function and thyroid function tests were within normal limits and autoantibodies were negative. A

CT brain scan showed only cortical atrophy. Discontinuation of treatment with digoxin was associated with marked improvement but not abolition of the choreic movements over the following seven days.

The relationship of the treatment with digoxin to the onset of the choreic episodes and the improvement on stopping therapy raises the possibility that the chorea was unleashed by the toxic levels of digoxin. The unilateral distribution of the dyskinesias, however, suggests an underlying structural lesion in the basal ganglia and a small lacunar cerebral infarct cannot be excluded. In patients with chorea induced by oral contraceptives a history of antecedent rheumatic chorea or striatal abnormality is invariably present.<sup>3</sup> Both digoxin and oral contraceptives are structurally similar in the possession of a steroid nucleus and may trigger chorea by altering central dopaminergic activity within the corpus striatum.

JA WEDZICHA  
WR GIBB  
AJ LEES  
BI HOFFBRAND  
Whittington Hospital,  
London N19 5NF, UK

### References

- <sup>1</sup> Lely AH, Van Euler CJH. Large scale digitoxin intoxication. *Br Med J* 1970;**iii**:737-40.
- <sup>2</sup> Aronson JK. Digitalis intoxication. *Clin Science* 1983;**64**:253-8.
- <sup>3</sup> Nausiede PA, Koller WC, Weiner WJ, Klawans HL. Chorea induced by oral contraceptives. *Neurology (Minneapolis)* 1979;**29**:1605-9.

Accepted 18 November 1983

## Notices

### Congress of Neurological Surgeons

The Thirty-fourth annual meeting will be held in New York, 30 September to 5 October, 1984. Information may be obtained from Michael Salzman, MD, 22 South Greene Street, Baltimore, Maryland 21201, USA.

The European Society for Paediatric Neurosurgery will meet in Vienna, 10-13 October 1984. Information may be obtained from Prof. W. Th. Koos, Neurochirurgische Universitäts Klinik, 9 Alsar Strasse 4-A1090 Vienna.