

Cover image: Electromagnetic machine

Editor

Martin Rossor (UK)

Deputy Editor

Michael Hanna (UK)

Associate Editors

Simon Fleminger (UK) Didier Leys (France) Philip Scheltens (The Netherlands) Peter Warnke (USA)

Web Editor

Rustam Al-Shahi (UK)

Editor, Practical Neurology

Charles Warlow (UK)

Editorial Board

See page iv

Editorial Office

Journal of Neurology Neurosurgery & BMJ Publishing Group Ltd **BMA** House Tavistock Square London WC1H 9JR, UK

T: +44 (0)20 7833 6890 F: +44 (0)20 7383 6668

E: jnnp@bmjgroup.com

ISSN: 0022-3050 (print) ISSN: 1468-330X (online)

Impact factor 3.857

Disclaimer: JNNP is published by BMJ Publishing Group Ltd, a wholly owned subsidiary of the British Medical Association. The BMJ Group grants editorial freedom to the Editor of JNNP. JNNP follows guidelines on editorial independence produced by the World Association of Medical Editors and the code on good publication practice of the Committee on Publication Ethics

JNNP is intended for medical professionals and is provided without warranty, express or implied. Statements in the journal are the responsibility of their authors and advertisers and not authors' institutions, the BMJ Publishing Group or the BMA unless otherwise specified or determined by law. Acceptance of advertising does not imply endorsement.

To the fullest extent permitted by law, the BMJ Publishing Group shall not be liable for any loss, injury or damage resulting from the use of JNNP or any information in it whether based on contract, tort or otherwise. Readers are advised to verify any information they choose to rely on

Copyright: © 2009 BMJ Publishing Group. All s 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 prior permission.

JNNP is published by BMJ Publishing Group Ltd, typeset by The Charlesworth Group and printed in the UK on acid-free paper from sustainable forests by Cambrian Printers Limited, Aberystwyth, UK.

Journal of Neurology Neurosurgery & Psychiatry (USPS No: 002-156) is published monthly by BMJ Publishing Group and distributed in the USA by Pitney Bowes International Mailing Services Inc as mailing agent. Periodicals postage paid at Kearny, NJ and additional mailing offices. POSTMASTER: send address changes to *Journal of Neurology* Neurosurgery & Psychiatry, PB International Mailing Services Inc., 500 US Hwy 46, Clifton, NJ, 07011, USA.

Contents

Volume 80 Issue 7 | JNNP July 2009

Editorial commentaries

- **703** What is the molecular pathology that underlies hippocampal memory decline? C R Harrington
- 704 The dependence scale: an easy tool to detect chronic daily headache with medication overuse?

C. Lucas, H-C. Diener

705 Declining stroke rates in southern Brazil: a positive result of socioeconomic development? C Anderson

Review

706 Diagnosis and new treatments in muscular dystrophies

A Y Manzur, F Muntoni

Research papers

715 Memory performance is related to amyloid and tau pathology in the hippocampus



C Reitz, L Honig, J P Vonsattel, M-X Tang, R Maveux

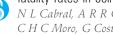
- 722 Association between 25-hydroxyvitamin D levels and cognitive performance in middleaged and older European men
 - D M Lee, A Tajar, A Ulubaev, N Pendleton, T W O'Neill, D B O'Connor, G Bartfai, S Boonen, R Bouillon, F F Casanueva, J D Finn, G Forti, A Giwercman, T S Han, I T Huhtaniemi, K Kula, M E J Lean, M Punab, A J Silman, D Vanderschueren, F C W Wu, the EMAS study
- **730** Early intervention for mild cognitive impairment: a randomised controlled trial G I Kinsella, E Mullaly, E Rand, B Ong, C Burton, S Price, M Phillips, E Storey
- **737** Functional and cognitive criteria produce different rates of mild cognitive impairment and conversion to dementia

I Saxton, B E Snitz, O L Lopez, D G Ives, L O Dunn, A Fitzpatrick, M C Carlson, S T DeKosky, for the GEM Study Investigators

Olfaction in patients with suspected parkinsonism and scans without evidence of dopaminergic deficit (SWEDDs)

L Silveira-Moriyama, P Schwingenschuh, A O'Donnell, S A Schneider, P Mir, F Carrillo, C Terranova, A Petrie, D G Grosset, N P Quinn, K P Bhatia, A J Lees

749 Trends in stroke incidence, mortality and case fatality rates in Joinville, Brazil: 1995-2006



N L Cabral, A R R Gonçalves, A L Longo, CHC Moro, G Costa, CH Amaral, MV Souza, J Eluf-Neto, L Augusto M Fonseca

- **755** Incidence of stroke subtypes, prognosis and prevalence of risk factors in Joinville. Brazil: a 2 year community based study N L Cabral, A R R Gonçalves, A L Longo, CHC Moro, G Costa, CH Amaral, L A M Fonseca, J Eluf-Neto
- **762** Age related white matter changes predict stroke death in long term follow-up NK J Oksala, A Oksala, T Pohjasvaara, R Vataja, M Kaste, P J Karhunen, T Erkinjuntti
- **767** Vision related quality of life in multiple sclerosis: correlation with new measures of low and high contrast letter acuity E M Mowry, M J Loguidice, A B Daniels, D A Jacobs, C E Markowitz, S L Galetta, M L Nano-Schiavi, G R Cutter, M G Maguire,
- 773 Long-term outcome of lesional posterior cortical epilepsy surgery in adults A E Elsharkawy, N M F El-Ghandour, F Oppel, H Pannek, R Schulz, M Hoppe, F G Woermann, M Navel, A Issa, A Ebner
- **781** Alleviation of carer strain during the use of the NeuroPage device by people with acquired brain iniury

T W Teasdale, H Emslie, K Quirk, J Evans, J Fish, B A Wilson

784 The Severity of Dependence Scale detects people with medication overuse: the Akershus study of chronic headache R B Grande, K Aaseth, J Šaltytė-Benth,

P Gulbrandsen, M B Russell, C Lundqvist

MORE CONTENTS ►



This article has been chosen by the Editor to be of specialist interest or importance and is freely available online.



This article has been chosen in conjunction with the BMJ Patient Forum to be of particular interest to patients and is freely available



Articles carrying the Unlocked Logo are freely available online under the BMJ Journals unlocked scheme. See http://jnnp.bmj.com/info/unlocked.dtl



This journal is a member of and subscribes to the principles of the Committee on Publication Ethics

www.publicationethics.org.uk



- **790** Risk of arrhythmia in type I myotonic dystrophy: the role of clinical and genetic variables P Cudia, P Bernasconi, R Chiodelli, F Mangiola, F Bellocci, A Dello Russo, C Angelini, V Romeo, P Melacini, L Politano, A Palladino, G Nigro, G Siciliano, M Falorni, M G Bongiorni, C Falcone, R Mantegazza, L Morandi
- 794 Brain penetration effects of microelectrodes and DBS leads in STN or GPi

 J M Mann, K D Foote, C W Garvan,

 H H Fernandez, C E Jacobson IV, R L Rodriguez,

 I U Haq, M S Siddiqui, I A Malaty, T Morishita,

 C J Hass, M S Okun

Short reports

- **799** Decompressive hemicraniectomy in subarachnoid haemorrhage: the influence of infarction, haemorrhage and brain swelling *E Güresir, A Raabe, M Setzer, H Vatter, R Gerlach, V Seifert, J Beck*
- **802** Walking the line: a randomised trial on the effects of a short term walking programme on cognition in dementia

 L H P Eggermont, D F Swaab, E M Hol,
 E J A Scherder

- 805 Prevalence and age of onset of Parkinson's disease in Cardiff: a community based cross sectional study and meta-analysis M M Wickremaratchi, D Perera, C O'Loghlen, D Sastry, E Morgan, A Jones, P Edwards, N P Robertson, C Butler, H R Morris, Y Ben-Shlomo
- **808** Relatively preserved knowledge of music in semantic dementia

 I C Hailstone, R Omar, I D Warren

PostScript

810 Letters

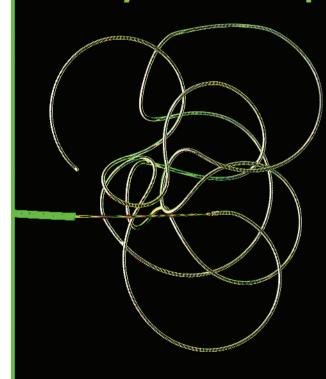
Proceedings

815 BNPA Abstracts

Neurological picture

797 MRI development of early white matter signs in cerebellar-type multisystem atrophy B M de Jong

Focus your mind on quality research every month



Journal of Neurology, Neurosurgery and Psychiatry keeps you right up to date with the whole field of clinical neurological practice, neurosurgery and psychiatry, so you'll want the guarantee of reading it every month.

Why not recommend the journal to your librarian or better still, obtain your own personal subscription? You will receive a paper copy every month as well as online access for **just £209 a year** (€282, \$408). Too much paper on your desk already? An online subscription is **just £122** (€165, \$238). Better still, a personal subscription includes the acclaimed bi-monthly *Practical Neurology*.

Visit **group.bmj.com/group/subs-sales** - your subscription to this first class journal is just a few clicks away.

jnnp.bmj.com

BMJIJournals