



Cover image: Mental Fitness, based on the image by Richard Tuschman.
Credit: Getty Images

Editor

Matthew C Kiernan (Australia)

Deputy Editors

Karen L Furie (USA)

Michael Hanna (UK)

Associate Editors

Alan Carson (UK)

Satoshi Kuwabara (Japan)

Nick Ward (UK)

Peter Warnke (USA)

Web Editors

Clare Caldwell

Arun Krishnan

Cindy Lin

Steve Vucic

Editors, Practical Neurology

Geraint Fuller (UK)

Phil Smith (UK)

Editorial Office

Journal of Neurology Neurosurgery & Psychiatry

BMJ Publishing Group Ltd

BMA House

Tavistock Square

London WC1H 9JR, UK

T: +44 (0)20 7383 6909

F: +44 (0)20 7383 6668

E: jnnp@bmj.com

ISSN: 0022-3050 (print)

ISSN: 1468-330X (online)

Impact factor: 4.94

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: © 2014 BMJ Publishing Group. 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 prior permission.

JNNP is published by BMJ Publishing Group Ltd, typeset by Techset, Chennai, India and printed in the UK on acid-free paper from sustainable forests.

Journal of Neurology Neurosurgery & Psychiatry (ISSN No: 0022-3050) is published monthly by BMJ Publishing Group and is distributed in the USA by Air Business Ltd. Periodicals postage paid at Jamaica NY 11431 POSTMASTER: send address changes to *Journal of Neurology Neurosurgery & Psychiatry*, Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA.

Contents

Volume 85 Issue 5 | **JNNP** May 2014

Editorial commentaries

- 473** How is the blood–nerve barrier involved in the pathogenetic mechanisms of multifocal motor neuropathy?
S Kusunoki

- 474** Deep brain stimulation for movement disorders: what counts in the end is the end result
P Warnke

- 475** Should all patients with ALS have genetic testing?
K Talbot

- 476** A roadmap for genetic testing in ALS
B J Traynor

- 477** Myasthenia gravis and pregnancy: pressing time for best practice guidelines
P Maddison

Neurogenetics

- 478** Genetic counselling in ALS: facts, uncertainties and clinical suggestions
A Chio, S Battistini, A Calvo, C Caponnetto, F L Conforti, M Corbo, F Giannini, J Mandrioli, G Mora, M Sabatelli, the ITALSGEN Consortium, C Ajmone, E Mastro, D Pain, P Mandich, S Penco, G Restagno, M Zollino, A Surbone

- 486** Novel *C12orf65* mutations in patients with axonal neuropathy and optic atrophy
A Tucci, Y-T Liu, E Preza, R D S Pitceathly, A Chalasani, V Plagnol, J M Land, D Trabzuni, M Ryten, on behalf of UKBEC, Z Jaunmuktane, M M Reilly, S Brandner, I Hargreaves, J Hardy, A B Singleton, A Y Abramov, H Houlden

- 493** Autosomal-recessive cerebellar ataxia caused by a novel *ADCK3* mutation that elongates the protein: clinical, genetic and biochemical characterisation
Y-T Liu, J Hersheson, V Plagnol, K Fawcett, K E C Duberley, E Preza, I P Hargreaves, A Chalasani, M Laurá, N W Wood, M M Reilly, H Houlden

- 499** The G1662S $\text{Na}_v1.8$ mutation in small fibre neuropathy: impaired inactivation underlying DRG neuron hyperexcitability
C Han, D Vasylyev, L J Macala, M M Gerrits, J G J Hoeijmakers, K J Bekelaar, S D Dib-Hajj, C G Faber, I S J Merckies, S G Waxman

- 506** *Profilin1* E117G is a moderate risk factor for amyotrophic lateral sclerosis
P Fratta, J Charnock, T Collins, A Devoy, R Howard, A Malaspina, R Orrell, K Sidle, J Clarke, M Shuai, Ching-hua Lu, J Hardy, V Plagnol, E M C Fisher

Cerebrovascular disease

- 509** Trends in the incidence of ischaemic stroke in young adults between 1985 and 2011: the Dijon Stroke Registry
Y Béjot, B Daubail, A Jacquin, J Durier, G-V Osseby, O Rouaud, M Giroud

- 514** The long-term outcomes of depression up to 10 years after stroke; the South London Stroke Register
L Ayerbe, S Ayis, S Crichton, C D A Wolfe, A G Rudd

- 522** MRI-visible perivascular spaces: relationship to cognition and small vessel disease MRI markers in ischaemic stroke and TIA
R Hurford, A Charidimou, Z Fox, L Cipolotti, R Jager, D J Werring

Neuromuscular

- 526** Sera from patients with multifocal motor neuropathy disrupt the blood–nerve barrier
F Shimizu, M Omoto, Y Sano, N Mastui, A Miyashiro, A Tasaki, T Maeda, M Koga, R Kaji, T Kanda

MORE CONTENTS ►



This article has been chosen by the Editor to be of special 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 online.



This article has been made freely available online under the BMJ Journals Open Access scheme. See <http://jnnp.bmj.com/site/about/guidelines.xhtml#open>



The article is part of the Impact Commentaries series

C O P E COMMITTEE ON PUBLICATION ETHICS

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

<http://publicationethics.org/>

equator network



When you have finished with this magazine please recycle it.

- 538** Myasthenia in pregnancy: best practice guidelines from a UK multispecialty working group

F Norwood, M Dhanjal, M Hill, N James, H Jungbluth, P Kyle, G O'Sullivan, J Palace, S Robb, C Williamson, D Hilton-Jones, C Nelson-Piercy

Multiple sclerosis

- 544** Reduced grey matter perfusion without volume loss in early relapsing-remitting multiple sclerosis

L Debernard, T R Melzer, S Van Stockum, C Graham, C AM Wheeler-Kingshott, J C Dalrymple-Alford, D H Miller, D F Mason

Movement disorders

- 552** Medical therapy and subthalamic deep brain stimulation in advanced Parkinson's disease: a different long-term outcome?

A Merola, L Rizzi, M Zibetti, C A Artusi, E Montanaro, S Angrisano, M Lanotte, M G Rizzone, L Lopiano

- 560** REM sleep behaviour disorder is associated with worse quality of life and other non-motor features in early Parkinson's disease



M Rolinski, K Szewczyk-Krolukowski, P R Tomlinson, K Nithi, K Talbot, Y Ben-Shlomo, M TM Hu

- 567** The safety and efficacy of thalamic deep brain stimulation in essential tremor: 10 years and beyond



J F Baizabal-Carvallo, M N Kagnoff, J Jimenez-Shahed, R Fekete, J Jankovic

- 573** The clinical features of psychogenic movement disorders resembling tics

J F Baizabal-Carvallo, J Jankovic

Neurodegeneration

- 576** Cognitive deficits in mild Parkinson's disease are associated with distinct areas of grey matter atrophy

E Mak, J Zhou, L C S Tan, W L Au, Y Y Sioh, N Kandiah

Epilepsy

- 581** Can fMRI safely replace the Wada test for preoperative assessment of language lateralisation? A meta-analysis and systematic review

P R Bauer, J B Reitsma, B M Houweling, C H Ferrier, N F Ramsey

PostScript

- 589** Letters

Receive regular table of contents by email.

Register using this QR code.

