



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

Twitter: @JNNP_BMJ

ISSN: 0022-3050 (print)

ISSN: 1468-330X (online)

Impact factor: 5.58

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 11 | JNNP November 2014

Editorial commentaries

1179 BENEFIT 8-year results provide further support for the long-term value of early treatment of multiple sclerosis
K Fujihara

1180 Are more sphingosine 1-phosphate receptor agonists a better therapeutic option against multiple sclerosis?
M Mori, S Kuwabara

1181 Natalizumab in clinical practice: managing the risks, enjoying the benefits
O Aktas

1182 Difficulties with control arms in repetitive magnetic stimulation studies
R Caslake

Multiple sclerosis

1183 Long-term impact of interferon beta-1b in patients with CIS: 8-year follow-up of BENEFIT
G Edan, L Kappos, X Montalbán, C H Polman, M S Freedman, H-P Hartung, D Müller, F Barkhof, J Herrmann, V Lanius, B Stemper, C Pohl, R Sandbrink, D Pleimes, for the BENEFIT Study Group

1190 Efficacy and safety of natalizumab in multiple sclerosis: interim observational programme results
H Butzkueven, L Kappos, F Pellegrini, M Trojano, H Wiendl, R N Patel, A Zhang, C Hotermans, S Belachew, on behalf of the TYSABRI Observational Program (TOP) Investigators

1198 Oral ponesimod in relapsing–remitting multiple sclerosis: a randomised phase II trial
T Olsson, A Boster, Ó Fernández, M S Freedman, C Pozzilli, D Bach, O Berkani, M S Mueller, T Sidorenko, E-W Radue, M Melanson

1209 Serum phosphorylated neurofilament-heavy chain levels in multiple sclerosis patients
M M Gresle, Y Liu, L F Dagley, J Haartsen, F Pearson, A W Purcell, L Laverick, A Petzold, R M Lucas, A Van der Walt, H Prime, D R Morris, B V Taylor, on behalf of the Ausimmune Consortium, G Shaw, H Butzkueven

Neuropsychiatry

1214 Mortality and morbidity 15 years after hospital admission with mild head injury: a prospective case-controlled population study
T M McMillan, C J Weir, J Wainman-Lefley

Neurodegeneration

1221 Immediate effect of spinal magnetic stimulation on camptocormia in Parkinson's disease
Y Arai, Y Sawada, K Kawamura, S Miyake, Y Taichi, Y Izumi, Y Kuroda, T Inui, R Kaji, T Mitsui

1227 Apolipoprotein E ε2 genotype delays onset of dementia with Lewy bodies in a Norwegian cohort
G Berge, S B Sando, A Rongve, D Aarsland, L R White

1232 Amyotrophic lateral sclerosis: a long preclinical period?
A Eisen, M Kiernan, H Mitumoto, M Swash

Movement disorders

1239 The impact and prognosis for dystonia in childhood including dystonic cerebral palsy: a clinical and demographic tertiary cohort study
J-P Lin, D E Lumsden, H Gimeno, M Kaminska

1245 Multiple changes of functional connectivity between sensorimotor areas in focal hand dystonia
C Dresel, Y Li, V Wilzeck, F Castrop, C Zimmer, B Haslinger

Neurosurgery

1253 Risk factors for congenital hydrocephalus: a nationwide, register-based, cohort study
T N Munch, M-L H Rasmussen, J Wohlfahrt, M Juhler, M Melbye

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



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

<http://publicationethics.org/>



When you have finished with this magazine please recycle it.

Neuroinfection

- 1260** Cerebral infarction and tuberculoma in central nervous system tuberculosis: frequency and prognostic implications

M Wasay, S Farooq, Z A Khawaja, Z A Bawa, S M Ali, S Awan, M A Beg, M M Mehndiratta

Neurogenetics

- 1265** Application of whole exome sequencing in undiagnosed inherited polyneuropathies

C J Klein, S Middha, X Duan, Y Wu, W J Litchy, W Gu, P James B Dyck, R H Gavrilova, D I Smith, J-P Kocher, P J Dyck

Epilepsy

- 1273** Advances in epilepsy surgery

M Nowell, A Miserocchi, A W McEvoy, J S Duncan



Cerebrovascular disease

- 1280** Common variants on 9p21.3 are associated with brain arteriovenous malformations with accompanying arterial aneurysms

N Bendjalali, J Nelson, S Weinsheimer, S Sidney, J G Zaroff, S W Hetts, M Segal, L Pawlikowska, C E McCulloch, W L Young, H Kim

- 1284** Degree of blood pressure reduction and recurrent stroke: the PROGRESS trial

H Arima, C Anderson, T Omai, M Woodward, S MacMahon, G Mancia, M-G Bousser, C Tzourio, S Harrap, L Liu, B Neal, J Chalmers, for the PROGRESS Collaborative Group

Neurological picture

- 1286** Pure motor monoparesis of the leg after carbon monoxide intoxication

Y Tajima, C Satoh, H Yaguchi, Y Mito

PostScript

- 1288** Letters

Receive regular table of contents by email.

Register using this QR code.

