



Editorial commentaries

229 Not all adverse health outcomes in former contact sports athletes are concussion related
E R Russell, T McCabe, W Stewart

230 Antineuronal antibodies and epilepsy: treat the patient, not the lab
S Riegg

231 In vivo PET imaging of neuroinflammation in familial frontotemporal dementia
H Seelaar, J C Van Swieten

232 CSF sphingomyelin: possible biomarker of demyelination
S Kusunoki

Cranial neuropathies

233 Medical treatment of SUNCT and SUNA: a prospective open-label study including single-arm meta-analysis
G Lambri, A Stubberud, K Rantell, S Lagrata, E Tronvik, M S Matharu

Cerebrovascular disease

242 Characteristics and outcomes of COVID-19 associated stroke: a UK multicentre case-control study
R J Perry, C J Smith, C Roffe, R Simister, S Narayanamoorthi, R Marigold, M Willmot, A Dixit, A Hassan, T J Quinn, S Ankolekar, L Zhang, S Banerjee, U Ahmed, N Padmanabhan, P Ferdinand, F McGrane, A Banaras, I H Marks, D J Werring, on behalf of the SETICOS collaborators

249 Long-term functional decline of spontaneous intracerebral haemorrhage survivors
M Pasi, B Casolla, M Kyheng, G Boulouis, G Kuchcinski, S Moulin, J Labreuche, H Henon, D Leys, C Cordonnier

255 New perspectives on brain death
M P Kirschen, A Lewis, M Rubin, P Kurtz, D M Greer

Cognitive neurology

263 Advances in neuroimaging to support translational medicine in dementia
T E Cope, R S Weil, E Düzel, B C Dickerson, J B Rowe

Sleep disorders

271 Olfactory impairment as an early marker of Parkinson's disease in REM sleep behaviour disorder: a systematic review and meta-analysis
Z Lyu, S Zheng, X Zhang, Y Mai, J Pan, T Hummel, A Hähner, L Zou

Neuropsychiatry

282 Distinct latent profiles based on neurobehavioural, physical and psychosocial functioning of former National Football League (NFL) players: an NFL-LONG Study
B L Brett, S R Walton, Z Y Kerr, L D Nelson, A Chandran, J D Defreese, R J Echemendia, K M Guskiewicz, W P Meehan III, M A McCrea

Neuro-inflammation

291 Clinical features which predict neuronal surface autoantibodies in new-onset focal epilepsy: implications for immunotherapies
R N McGinty, A Handel, T Moloney, A Ramesh, A Fower, E Torzillo, H Kramer, S Howell, P Waters, J Adcock, A Sen, B Lang, S R Irani

MORE CONTENTS ►

Editor

Matthew C Kiernan (Australia)

Deputy Editors

Karen L Furie (USA)
Satoshi Kuwabara (Japan)
Lawrence Wong (China)

Associate Editors

Alan Carson (UK)
Nick Ward (UK)
Peter Warnke (USA)

Commissioning Editor

Martin Turner (UK)

Web Editors

Clare Caldwell
Arun Krishnan
Cindy Lin
Steve Vucic

Podcast Editor

Colin Mahoney

JNNP Blog Editors

Jose Manuel Matamala
Thanuja Dharmadasa

JNNP Facebook Editors

Cindy Lin
William Huynh

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
E: jnnp@bmj.com

Twitter: @JNNP_BMJ
ISSN: 0022-3050 (print)
ISSN: 1468-330X (online)
Impact factor: 8.263

Disclaimer: The Editor of JNNP has been granted editorial freedom and JNNP is published in accordance with editorial guidelines issued by the World Association of Medical Editors and its content is for information only. The Journal is published without any guarantee as to its accuracy or completeness and any representations or warranties are expressly excluded to the fullest extent permitted by law. Readers are advised to independently verify any information on which they choose to rely. Acceptance of advertising by JNNP does not imply endorsement. BMJ Publishing Group Limited shall not be liable for any loss, injury or damage howsoever arising from JNNP (except for liability which cannot be legally excluded).

Copyright: © 2021 BMJ Publishing Group Ltd. All rights reserved; no part of this publication may be reproduced in any form without permission.

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

Journal of Neurology Neurosurgery & Psychiatry /ISSN 0022-3050 (USPS 2156) is published monthly by BMJ Publishing Group Ltd, BMA House, Tavistock Square, WC1H 9JR London. Airfreight and mailing in the USA by agent named World Container Inc, 150-15, 183rd Street, Jamaica, NY 11413, USA. Periodicals postage paid at Brooklyn, NY 11256.

US Postmaster: Send address changes to Journal of Neurology Neurosurgery & Psychiatry, World Container Inc, 150-15, 183rd Street, Jamaica, NY 11413, USA. Subscription records are maintained at BMA House, Tavistock Square, WC1H 9JR London. Air Business Ltd is acting as our mailing agent.



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://authors.bmj.com/open-access/



The article is part of the Impact Commentaries series



Member since 2008 JM00010

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.



The online version of this article contains multiple choice questions hosted on BMJ Learning.

Multiple sclerosis

- 295** Systematic approach to selecting licensed drugs for repurposing in the treatment of progressive multiple sclerosis



N Cunniffe, K A Vuong, D Ainslie, D Baker, J Beveridge, S Bickle, P Camilleri, M Craner, D Fitzgerald, A G de la Fuente, G Giovannoni, E Gray, L Hazlehurst, R Kapoor, R Kaur, D Kozlowski, B Lusicisi, D Mahad, B Neumann, A Palmer, L Peruzzotti-Jametti, S Pluchino, J Robertson, A Rothaul, L Shellard, K J Smith, A Wilkins, A Williams, A Coles

Neuromuscular

- 303** CSF sphingomyelin: a new biomarker of demyelination in the diagnosis and management of CIDP and GBS



G Capodivento, C De Michelis, M Carpo, R Fancellu, E Schirinzi, D Severi, D Visigalli, D Franciotta, F Manganelli, G Siciliano, A Beronio, E Capello, P Lanteri, E Nobile-Orazio, A Schenone, L Benedetti, L Nobbio

- 311** Antiglycolipid antibodies in Guillain-Barré and Fisher syndromes: discovery, current status and future perspective

S Kusunoki, H J Willison, B C Jacobs

Neurodegeneration

- 319** In vivo PET imaging of neuroinflammation in familial frontotemporal dementia



M Malpetti, T Rittman, P S Jones, T E Cope, L Passamonti, W R Bevan-Jones, K Patterson, T D Fryer, Y T Hong, F I Aigbirhio, J T O'Brien, J B Rowe

- 323** Middle-age dementia risk scores and old-age cognition: a quasi-experimental population-based twin study with over 20-year follow-up



P Iso-Marleku, J Kaprio, N Lindgren, J O Rinne, E Vuoksima

Neurological picture

- 331** Unusual radiological features on diffusion-weighted imaging in myelin oligodendrocyte glycoprotein-associated disease



E O'Sullivan, J Hart, A Bates, J Palace

PostScript

- 332** Brain structural alterations in patients with *GCH1* mutations associated with DOPA-responsive dystonia

V S Kostić, F Agosta, A Tomic, E Sarasso, N Kresojevic, S Basaia, M Svetel, M Copetti, M Filippi

- 334** Physical activity and Parkinson's disease: a two-sample Mendelian randomisation study

S Baumeister, C Meisinger, M Leitzmann, A Teumer, M Bahls, A Karch, H Baurecht

- 336** Increased ethnicity and socioeconomic data collection required in stroke associated with COVID-19

D Hafeez, J Song, C Watson, A Rooney, T R Nicholson, The SARS-COV-neuro collaboration

- 337** Effect of combined facial exercise with botulinum toxin A on health-related quality of life in Thai adults with hemifacial spasm: a randomised controlled pilot cross-over trial

Y Pitakpatapee, P Soontrapa, A Suengtaworn, J Srikajon, T Sangpeamsook, C Komoltri, P Srivanitchapoom

- 340** Expanding the phenotype of MOG antibody-associated disease (MOGAD): half a century of epilepsy and relapsing optic neuritis

I Kleerekooper, S A Trip, G T Plant, A Petzold