

BRAIN

A JOURNAL OF NEUROLOGY



Cover image: Anticipatory pupil responses reveal how different brains process and evaluate upcoming potential rewards. Apathetic Parkinson's disease patients show blunted pupillary reward sensitivity compared to motivated patients. From Muhammed et al. Reward sensitivity deficits modulated by dopamine are associated with apathy in Parkinson's disease. Pp. 2706–2721.

Contents

Editorial

- Bench to bedside advances in the 21st century for primary headache disorders: migraine treatments for migraine patients**
P. J. Goadsby
2571

Scientific Commentaries

- Short-lasting unilateral neuralgiform headache attacks: where is the headache generator?**
M. Leone and A. P. Cecchini
2578

- Memory in autoimmune NMDA receptor encephalitis: an issue for B cells and patients**
A. Zekeridou and V. A. Lennon
2581

- Targeting tubers in paediatric epilepsy surgery candidates**
M. Duchowny
2583

- Does BDNF Val66Met contribute to preclinical Alzheimer's disease?**
E. Rogaeva and G. Schmitt-Ulms
2586

Updates

- Cervical dystonia: a neural integrator disorder**
A. G. Shaikh, D. S. Zee, J. D. Crawford and H. A. Jinnah
2590

- The promises and pitfalls of applying computational models to neurological and psychiatric disorders**
C. Teufel and P. C. Fletcher
2600

Report

A case cluster of variant Creutzfeldt-Jakob disease linked to the Kingdom of Saudi Arabia

M. B. Coulthart, M. D. Geschwind, S. Qureshi, N. Phielipp, A. Demarsh, J. Y. Abrams, E. Belay, P. Gambetti, G. H. Jansen, A. E. Lang and L. B. Schonberger

2609

Original Articles

Auto-antibodies to contactin-associated protein 1 (Caspr) in two patients with painful inflammatory neuropathy

K. Doppler, L. Appeltshauser, C. Villmann, C. Martin, E. Peles, H. H. Krämer, A. Haarmann, M. Buttmann and C. Sommer

2617

Ventral tegmental area deep brain stimulation in refractory short-lasting unilateral neuralgiform headache attacks

S. Miller, H. Akram, S. Lagrata, M. Hariz, L. Zrinzo and M. Matharu

2631

Human cerebrospinal fluid monoclonal N-methyl-D-aspartate receptor autoantibodies are sufficient for encephalitis pathogenesis

J. Kreye, N. K. Wenke, M. Chayka, J. Leubner, R. Murugan, N. Maier, B. Jurek, L.-T. Ly, D. Brandl, B. R. Rost, A. Stumpf, P. Schulz, H. Radbruch, A. E. Hauser, F. Pache, A. Meisel, L. Harms, F. Paul, U. Dirnagl, C. Garner, D. Schmitz, H. Wardemann and H. Prüss

2641

Centre of epileptogenic tubers generate and propagate seizures in tuberous sclerosis

L. Kannan, S. Vogrin, C. Bailey, W. Maixner and A. S. Harvey

2653

Psychotic disorders induced by antiepileptic drugs in people with epilepsy

Z. Chen, A. Lusicic, T. J. O'Brien, D. Velakoulis, S. J. Adams and P. Kwan

2668

Widespread changes in network activity allow non-invasive detection of mesial temporal lobe seizures

A. D. Lam, R. Zepeda, A. J. Cole and S. S. Cash

2679

Delayed seizures after intracerebral haemorrhage

A. Biffi, A. Rattani, C. D. Anderson, A. M. Ayres, E. M. Gurol, S. M. Greenberg, J. Rosand and A. Viswanathan

2694

Reward sensitivity deficits modulated by dopamine are associated with apathy in Parkinson's disease

K. Muhammed, S. Manohar, M. Ben Yehuda, T. T.-J. Chong, G. Tofaris, G. Lennox, M. Bogdanovic, M. Hu and M. Husain

2706

LIN28A enhances the therapeutic potential of cultured neural stem cells in a Parkinson's disease model

Y.-H. Rhee, T.-H. Kim, A.-Y. Jo, M.-Y. Chang, C.-H. Park, S.-M. Kim, J.-J. Song, S.-M. Oh, S.-H. Yi, H. H. Kim, B.-H. You, J.-W. Nam and S.-H. Lee

2722

Amyloid- β deposition and regional grey matter atrophy rates in dementia with Lewy bodies

L. Sarro, M. L. Senjem, E. S. Lunde, S. A. Przybelski, T. G. Lesnick, J. Graff-Radford, B. F. Boeve, V. J. Lowe, T. J. Ferman, D. S. Knopman, G. Comi, M. Filippi, R. C. Petersen, C. R. Jack, Jr. and K. Kantarci

2740

Alzheimer-related decrease in CYFIP2 links amyloid production to tau hyperphosphorylation and memory loss

S. S. Tiwari, K. Mizuno, A. Ghosh, W. Aziz, C. Troakes, J. Daoud, V. Golash, W. Noble, T. Hortobágyi and K. P. Giese

2751

BDNF Val66Met moderates memory impairment, hippocampal function and tau in preclinical autosomal dominant Alzheimer's disease

Y. Y. Lim, J. Hassenstab, C. Cruchaga, A. Goate, A. M. Fagan, T. L. S. Benzinger, P. Maruff, P. J. Snyder, C. L. Masters, R. Allegri, J. Chhatwal, M. R. Farlow, N. R. Graff-Radford, C. Laske, J. Levin, E. McDade, J. M. Ringman, M. Rossor, S. Salloway, P. R. Schofield, D. M. Holtzman, J. C. Morris and R. J. Bateman on behalf of the Dominantly Inherited Alzheimer Network

2766

Healthy brain connectivity predicts atrophy progression in non-fluent variant of primary progressive aphasia

M. L. Mandelli, E. Vilaplana, J. A. Brown, H. I. Hubbard, R. J. Binney, S. Attygalle, M. A. Santos-Santos, Z. A. Miller, M. Pakvasa, M. L. Henry, H. J. Rosen, R. G. Henry, G. D. Rabinovici, B. L. Miller, W. W. Seeley and M. L. Gorno-Tempini

2778

NRSN1 associated grey matter volume of the visual word form area reveals dyslexia before school

M. A. Skeide, I. Kraft, B. Müller, G. Schaadt, N. E. Neef, J. Brauer, A. Wilcke, H. Kirsten, J. Boltze and A. D. Friederici

2792

Dorsal column

From the Archives

A psychological inquiry into the nature of the condition known as congenital word-blindness. By Lucy G. Fildes. *Brain* 1921; 44: 286–307. With A neurological appraisal of familial congenital word-blindness. By Arthur L. Drew. From Department of Neurology, University of Michigan, Ann Arbor, Michigan, USA. *Brain* 1956; 79: 440–60

A. Compston

2804

Grey Matter

Brainwaves in concert: the 20th century sonification of the electroencephalogram

B. Lutters and P. J. Koehler

2809

Letters to the Editor

Neural substrates of vulnerability to post-surgical delirium with prospective diagnosis

H. Lindroth and R. D. Sanders

e54

Reply: Neural substrates of vulnerability to post-surgical delirium with prospective diagnosis

M. Cavallari, C. R. G. Guttmann, R. N. Jones, S. K. Inouye and D. C. Alsop on behalf of the SAGES Study Group

e55

MORC2 mutations in a cohort of Chinese patients with Charcot-Marie-Tooth disease type 2

X. Zhao, X. Li, Z. Hu, L. Liu, Y. Xie, T. Tian, J. Man, J. Wang, X. Zi, K. Xia, B. Tang, X. Wei and R. Zhang

e56

The role of DNAJB2 in amyotrophic lateral sclerosis

M. Frasquet, J. F. Vázquez-Costa and T. Sevilla

e57

Reply: The role of DNAJB2 in amyotrophic lateral sclerosis

H.-J. Chen and C. E. Shaw

e58

ATXN2 polymorphism modulates age at onset in Machado-Joseph disease

D. Ding, K. Li, C. Wang, Z. Chen, Z. Long, Y. Peng, X. Zhou, H. Peng, R. Qiu, K. Xia, B. Tang and H. Jiang

e59