IN BRIEF

DEMENTIA

A new study by Lin *et al.* has identified a novel type of TDP-43 (TAR DNA-binding protein 43)-containing structure in the brains of individuals who had either frontotemporal lobar degeneration with ubiquitin-positive inclusions (FTLD-U) or familial Lewy body disease. The structures consisted of unmyelinated cell processes abutting—and sometimes protruding into—the capillary basal lamina. These processes could, the authors suggest, correspond to astrocytic end-feet that contain abnormal TDP-43 fibrillary inclusions. The presence of such TDP-43 microvasculopathy could have important implications for the integrity of the blood–brain barrier in conditions such as FTLD-U and Lewy body disease.

Original article Lin, W.-L. *et al.* Transactivation response DNA-binding protein 43 microvasculopathy in frontotemporal degeneration and familial Lewy body disease. *J. Neuropathol. Exp. Neurol.* **68**, 1167–1176 (2009)

EPILEPSY

Typical absence seizures are a common feature of idiopathic generalized epilepsy, but the mechanisms underlying the generation of these seizures are poorly understood. Impairments in γ-aminobutyric acid (GABA)-mediated inhibition have previously been implicated in this process. As reported in *Nature Medicine*, however, David Cope and colleagues have now shown that extrasynaptic $GABA_A$ receptor-dependent tonic inhibition is actually enhanced in thalamocortical neurons in animal models of absence seizures. These extrasynaptic $GABA_A$ receptors might, therefore, represent attractive targets for the development of new drugs for the treatment of typical absence epilepsy.

Original article Cope, D. W. *et al.* Enhanced tonic $GABA_A$ inhibition in typical absence epilepsy. *Nat. Med.* **15**, 1392–1398 (2009)

ALZHEIMER DISEASE

Researchers at hospitals in Rennes and Toulouse, France have conducted detailed cognitive, functional, nutritional and behavioral assessments of 126 patients who were entering the severe stage of Alzheimer disease. Abilities that were relatively well preserved in these patients included social interaction, response to one's own name, and locomotion. By contrast, the greatest impairments were seen in language, orientation, memory, praxis and personal hygiene. Behavioral disorders and malnourishment were also frequently observed. The authors suggest that knowledge of which abilities are spared and which are impaired during the transition from moderate to severe Alzheimer disease could help practitioners to optimize the management of patients with this condition.

Original article Gillioz, A.-S. *et al.* Spared and impaired abilities in community-dwelling patients entering the severe stage of Alzheimer's disease. *Dement. Geriatr. Cogn. Disord.* **28**, 427–432 (2009)