IN BRIEF

MULTIPLE SCLEROSIS

Conversion of clinically isolated syndrome (CIS) to multiple sclerosis (MS) is commonly detected by MRI, but Comabella et al. have now identified a promising cerebrospinal fluid biomarker for this event. A proteomic screen revealed that patients who converted to clinically definite MS had higher levels of chitinase 3-like 1 protein in their CSF than those who did not progress beyond CIS. In addition to serving as a prognostic biomarker, this protein might provide new insights into the molecular mechanisms underlying MS.

Original article Comabella, M. *et al.* Cerebrospinal fluid chitinase 3-like 1 levels are associated with conversion to multiple sclerosis. *Brain* **133**, 1082–1093 (2010)

Despite strong evidence that acute multiple sclerosis (MS) relapses usually have a benign natural history, many patients are still afraid that a relapse could result in permanent disability. In a study by Bejaoui and Rolak, 1,078 patients with relapsing–remitting MS experienced a total of 2,587 relapses, but only 7 sustained severe neurological impairment that failed to resolve. Given the rarity of permanently disabling MS relapses, the researchers propose that treatment decisions should not be driven by the fear of such eventualities.

Original article Bejaoui, K. & Rolak, L. A. What is the risk of permanent disability from a multiple sclerosis relapse? *Neurology* **74**, 900–902 (2010)

INTRACEREBRAL HEMORRHAGE

Researchers in Spain have established a link between high serum ferritin levels and poor outcomes in patients with intracerebral hemorrhage (ICH), consistent with previous data indicating that iron released from erythrocytes and ferritin stores exacerbates cerebral injury after experimental ICH. The findings suggest that increased iron stores have neurotoxic effects in patients with ICH, and that iron chelation therapy could be beneficial for these individuals.

Original article Pérez de la Ossa, N. et al. Iron-related brain damage in patients with intracerebral hemorrhage. Stroke 41, 810–813 (2010)

SPINAL CORD INJURY

The retinoic acid analog fenretinide reduces inflammation and promotes functional recovery in a mouse model of spinal cord injury, according to research by López-Vales and colleagues. The drug seems to work by reducing plasma levels of the pro-inflammatory polyunsaturated fatty acid (PUFA) arachidonic acid and increasing levels of the anti-inflammatory PUFA docosahexaenoic acid. Fenretinide is already being tested in clinical trials for the treatment of cancer, and the new findings suggest that its applications could extend to the treatment of acute spinal cord injury.

Original article López-Vales, R. et al. Fenretinide promotes functional recovery and tissue protection after spinal cord contusion injury in mice. *J. Neurosci.* 30, 3220–3226 (2010)

RESEARCH HIGHLIGHTS