

compared with controls, although the degree of displacement compared with that in patients without neuropathic pain was not significant.

The authors conclude that radical S1 reorganization following spinal cord injury correlates with the experience of neuropathic pain below the injury. Strategies to reduce the degree of S1 reorganization might have therapeutic benefit against neuropathic pain in patients with spinal cord injury.

**Original article** Wrigley PJ *et al.* (2008) Neuropathic pain and primary somatosensory cortex reorganization following spinal cord injury. *Pain* [doi:10.1016/j.pain.2008.10.007]

### Anticardiolipin antibodies are associated with epileptic seizure frequency

Antiphospholipid antibodies have been associated with epilepsy, but the relationship between levels of these antibodies and seizure frequency, or duration, type and etiology of well-characterized epilepsy has not been determined. Liimatainen and colleagues, therefore, investigated the effect of parameters of antiphospholipid antibodies in patients with refractory focal epilepsy.

The researchers measured IgG and IgM class anticardiolipin, anti- $\beta$ 2-glycoprotein 1 and antinuclear antibody levels in 105 adult patients with refractory focal epilepsy (86 patients had recent seizures, i.e. during the month before sampling) evaluated over a 2-year period, and 70 healthy controls. Compared with patients with no recent seizures and controls, patients with recent seizures had higher levels of IgG class anticardiolipin antibodies (11% and 13%, respectively, versus 29%). Levels of IgM class anticardiolipin antibodies or antinuclear antibodies did not differ notably between the three study groups. No associations were observed between prevalence of IgG class anticardiolipin antibodies and etiology, duration or type of epilepsy.

Liimatainen *et al.* were unable to determine whether changes in the levels of antiphospholipid antibodies were a result of, or a causal factor in, epileptic seizures; however, these results suggest that levels of IgG class anticardiolipin antibodies correlate with seizure frequency. Such antibodies could, therefore,

be useful markers to predict outcome in patients with epilepsy.

**Original article** Liimatainen S *et al.* (2009) The high prevalence of antiphospholipid antibodies in refractory focal epilepsy is related to recurrent seizures. *Eur J Neurol* 16: 134–141

### Parkinson disease assessment feasible with an at-home testing device

A new, electronic device for home use that measures and records small changes in Parkinson disease (PD) symptoms has been developed to improve patients' adherence to clinical trials where travel to medical centers is difficult. Goetz *et al.* tested the feasibility of this at-home testing device (AHTD) and compared measurements of motor function with those recorded by the Unified Parkinson Disease Rating Scale (UPDRS).

A total of 50 patients with early PD (mean PD duration 75.4 weeks) completed the 6 month trial. The UPDRS motor score was obtained on enrollment (mean baseline score 19.5) and at 3 months and 6 months. Patients were trained to use the AHTD to perform weekly 30 min tests to assess tremor and impaired movement and speech.

Compliance with the AHTD tests was 90.6%, and the mean overall satisfaction score was 96.5 (on a 100-point scale). The patients' mean UPDRS motor score increased by 2.45 from baseline to 3 months (but remained unchanged between month 3 and month 6), which indicated a decline in overall motor function. Changes in tremor recorded by the AHTD, detected in the first month of the study, correlated with changes in UPDRS score. Other measures of the AHTD were no better than the UPDRS for observing parkinsonian symptoms; however, AHTD assessments of tremor, speech and finger tapping did show a decline in severity over time.

AHTD is a feasible method of assessing changes in PD symptoms and the authors plan to develop further assessment tests using this format.

**Original article** Goetz CG *et al.* (2008) Testing objective measures of motor impairment in early Parkinson's disease: feasibility study of an at-home testing device. *Mov Disord* [doi:10.1002/mds.22379]