

in the adjusted odds of developing depression. Longitudinal–cross-sectional analysis revealed that, compared with participants who were SRBD-free, those who had minimal SRBD had a 1.6-fold increased risk of developing depression and those with moderate SRBD had a 2.6-fold increased risk.

The authors conclude that there is a dose-response association between SRBD and depression, and that clinicians should maintain a heightened suspicion for depression in patients with SRBD.

Original article Peppard PE *et al.* (2006) Longitudinal association of sleep-related breathing disorder and depression. *Arch Intern Med* **166**: 1709–1715

Increased urine aluminum levels found in patients with MS

Multiple sclerosis (MS) is thought to result from a combination of environmental factors and genetic susceptibility, and some evidence suggests that oxidative damage might mediate the inflammatory response associated with the disease. In a recent study reported in *Multiple Sclerosis*, researchers investigated the urinary levels of iron and aluminum in patients with MS; their results indicate that both metals might play a part in the condition.

Exley and colleagues carried out an analysis of urine samples from 10 patients with secondary progressive MS, 10 patients with relapsing–remitting MS and 10 control subjects. Using spectroscopy, they determined the total urinary concentrations of aluminum and its antagonist silicon, and of iron.

The median urine iron and aluminum concentrations were higher in patients with MS than in controls. Both increases reached significance for patients with secondary progressive MS ($P < 0.01$ and $P < 0.05$, respectively); the increase in aluminum was also significant in patients with relapsing–remitting MS ($P < 0.001$), with levels reaching those usually found in patients undergoing metal chelation therapy. Silicon urine concentrations were lower in patients with MS than in controls.

The authors suggest that the increased urinary iron excretion in patients with MS lends support to the hypothesis that brain iron metabolism is disrupted in this disorder. They note that aluminum could also be involved in MS disease progression, and propose that,

if this is the case, an increase in the dietary intake of silicon might be a therapeutic option for the disease.

Original article Exley C *et al.* (2006) Elevated urinary excretion of aluminium and iron in multiple sclerosis. *Mult Scler* **12**: 533–540

Delayed carotid endarterectomy recommended for patients with completed stroke

Carotid endarterectomy (CEA) is effective at preventing further strokes in patients who have experienced transient ischemic attack (TIA) or stroke, yet there is uncertainty regarding the optimum timing of the procedure after stroke. In this retrospective study, Rockman *et al.* reviewed data from 1,046 patients who had undergone CEA following TIA or completed stroke, comparing ‘early’ (≤ 4 weeks following symptoms) with ‘delayed’ (> 4 weeks after last symptom) surgery.

Patients receiving early CEA were significantly more likely to experience perioperative stroke than those undergoing the delayed procedure within both the completed stroke (9.4% vs 2.4%; $P = 0.003$) and TIA (3.3% vs 0.9%; $P = 0.05$) groups. The authors recommend consideration of a waiting period of 4 weeks between last stroke symptoms and the performance of CEA for patients diagnosed with completed stroke. Despite the results, they do not suggest a change in practice for patients with TIA, for whom early CEA intervention is regarded as beneficial.

Recent institutional reports indicate that the greatest benefits from CEA occur when the procedure is performed within 2 weeks of initial symptoms. Such findings conflict with the results of this study; however, the patients reviewed by Rockman *et al.* were not randomized, and characteristics of clinical presentation could have affected both CEA timing and the likelihood of perioperative complications. The authors note marked heterogeneity in the clinical manifestation of stroke and suggest that analyses of additional data such as pre-operative CT scans (unavailable for this study) would help identify patients who would benefit from early, as opposed to delayed, CEA.

Original article Rockman CB *et al.* (2006) Early carotid endarterectomy in symptomatic patients is associated with poorer perioperative outcomes. *J Vasc Surg* **44**: 480–487