Clinical shorts

Managing fever, hyperglycemia and dysphagia in acute stroke: Patient outcomes after acute stroke are improved when nurses initiate and implement standardized protocols for managing fever, hyperglycemia and swallowing dysfunction. These variables are common in acute stroke and result in increased morbidity and mortality. A total of 19 acute stroke units were randomly assigned to receive evidence-based treatment protocols and team-building workshops (intervention) or abridged versions of existing guidelines (control) in this single-blinded cluster randomized controlled trial. Data were obtained from 1696 patients (1009 postintervention) who had a diagnosis of acute stroke and presented within 48 hours to a participating acute stroke unit. At 90 days after admission, patients in the intervention units were less likely to be dead or dependent than those in the control units (42% v. 58%, adjusted absolute difference 15.7%, 95% confidence interval 5.8–25.4), irrespective of severity of the stroke. The authors stress that this intervention has a lower number needed to treat (6.4) than other established interventions in acute stroke such as administration of aspirin within 48 hours (79), care in a stroke unit (18) and thrombolysis within 4.5 hours (8 to 14). See *Lancet* 2011;378:1699-706.

Adding niacin to intensive statin therapy: Adding niacin to intensive statin therapy had no additional clinical benefit after three years in patients with established cardiovascular disease. This is the result of a blinded randomized trial that included 3414 patients with known cardiovascular disease (documented stable coronary artery disease, cerebrovascular or carotid disease, or peripheral artery disease) and low baseline levels of high-density lipoprotein (HDL) cholesterol. Patients were randomized to receive extended-release niacin or placebo, in addition to simvastatin and ezetimibe, if needed, to maintain a target low-density lipoprotein level. The primary end point was a composite that included death from coronary artery disease, as well as other cardiovascular and cerebrovascular outcomes. The trial was stopped after three years because niacin therapy did not improve outcomes, and a higher rate of ischemic stroke was seen in patients treated with niacin. Although niacin therapy significantly improved HDL cholesterol and triglyceride levels, occurrence of the primary end point was similar in both groups (16.4% in niacin group v. 16.2% in placebo group, hazard ratio 1.02, 95% confidence interval 0.87–1.21). See *N Engl J Med* 2011; 10.1056/NEJMoa1107579.

Comprehensive geriatric assessment after admission to hospital: Comprehensive geriatric assessment increases the likelihood of an older adult being alive and returning home after an emergency admission to hospital. Twenty-two trials with 10 315 participants were included in a meta-analysis of randomized controlled trials that looked at the effectiveness of comprehensive geriatric assessment in hospital for patients 65 years of age or older who were admitted as an emergency. At one year, older adults who had a comprehensive assessment were more likely to be alive and living in their own homes (odds ratio 1.16, 95% confidence interval 1.05–1.28, number needed to treat 33) than those who received usual medical care. Cognitive function was also improved. Those who received care in wards designated for comprehensive geriatric assessment fared better than those who were seen by mobile assessment teams. See *BMJ* 2011;343:d6553 doi:10.1136/bmj.d6553.

Frequency of INR monitoring: It is probably safe to check international normalized ratios (INRs) every 12 weeks, rather than every 4 weeks, in patients taking warfarin whose maintenance dose is stable. In this blinded noninferiority randomized trial, 250 patients receiving long-term warfarin therapy whose dose had been unchanged for at least six months were scheduled for INR testing every four weeks. Patients were randomized into two groups: for one group, test results were sent to the treating physician every 4 weeks; for the other group, true INRs were reported every 12 weeks, with sham INRs close to or in the target range reported for the other 4-week periods. (The true INRs for the 12-week group were reviewed separately, and the results required unblinding twice.) Patients in both groups were contacted by phone every four weeks to change the warfarin dosage if required and to inquire about bleeding, thromboembolic events or newly started antibiotic treatment. At one year, the mean percentage of time the INR was in the therapeutic range was similar in both groups: 74.1% (standard deviation [SD] 18.8%) in the group monitored every 4 weeks and 71.6% (SD 20.0%) in the 12-week group. Those in the 4-week group had more changes in maintenance dose than those in the 12-week group. There was no difference in clinical events (major bleeding, thromboembolic events or death) between the two groups. These results are promising. More research is needed, however, before prolonged intervals for testing can be implemented routinely, because all patients had contact with staff and received INR testing every four weeks. See *Ann Intern Med* 2011;155:653-9.

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