Clinical shorts

Tailored treatment of back pain: Stratifying management of back pain in adults according to prognosis results in improved disability scores compared with standard care — and is less expensive. This is the conclusion of a randomized trial involving 851 adults with back pain, with or without radiculopathy, who were referred from 10 general practices in England. Participants were assigned to receive usual care (assessment by a physiotherapist and further treatment, if required) or the intervention, which consisted of a simple screening questionnaire that stratified patients into risk groups (low, medium and high) based on prognosis and a treatment program targeted to the patient's level of risk.

At four months' follow up, overall mean changes in a validated disability score were significantly higher in the intervention group than in the control group (4.7 [standard deviation 5.9] v. 3.0 [5.9]), with a between-group difference of 1.81 (95% confidence interval 1.06 to 2.57). Significant improvements in disability were also noted at 12 months, and in secondary outcome measures that included physical and emotional functioning, quality of life, intensity of pain and days off work. Cost savings were greater in the intervention group. See *Lancet* 2011; doi:10.1016/S0140-6736(11)60937-9.

Rate of progression of disease in COPD: Chronic obstructive pulmonary disease (COPD) results in an accelerated decline in forced expiratory volume in one second (FEV_1), but this decline is faster in patients who continue to smoke, have emphysema or have bronchodilator reversibility, say the authors of a three-year observational study. The 2163 participants in the study received usual care for their COPD, managed by their usual physicians.

The mean rate of change in FEV_1 was 33±2 mL per year, with substantial variation in the levels of change. More than one in three participants (38%) had an estimated rate of decline of more than 40 mL per year, but in some participants (8%), FEV_1 actually increased by more than 20 mL per year. The rate of decline was not affected by age, cumulative tobacco exposure or number of previous exacerbations. Exacerbations during follow up had a small effect on the rate of decline. Because patients who continued to smoke were at increased risk for progression of their disease compared with former smokers, the authors stress that smoking cessation is the most important tool in secondary and tertiary prevention for patients at all stages of COPD. See *N Engl J Med* 2011;365: 1184-92.

Evaluation of lymph nodes in cancer of the colon: Although the number of lymph nodes evaluated during surgery for cancer of the colon has increased over the past 20 years, this practice has not been associated with a shift toward diagnosis of higher-stage cancers. Using data from the Surveillance, Epidemiology, and End Results (SEER) program from 1998 to 2008, the authors of this study looked at the relationship between evaluation of lymph nodes and node positivity in 86 394 adults surgically treated for cancer of the colon.

During 1988–1990, 34.6% of patients had 12 or more lymph nodes evaluated, compared with 73.6% during 2006–2008 ($p < 0.001$); however, the proportion of node-positive cancers was similar (40% v. 42%). Although patients with high numbers of lymph nodes evaluated were slightly more likely to be node-positive, paradoxically they had significant reduction in mortality hazard at five years compared with those who had fewer nodes evaluated (adjusted hazard ratio for 30–39 nodes v. 1–8 nodes, 0.66, 95% confidence interval 0.62 to 0.71.) Hence, the increased survival seen in cancer of the colon is probably not due to more accurate staging; rather, it may be a result of other factors, such as improved surgical quality or postsurgical care. The authors caution that initiatives to improve quality aimed at increasing evaluation of lymph nodes for cancer of the colon may have a limited effect on improving survival. See *JAMA* 2011; 306:1089-97.

Is immune globulin beneficial in treating neonatal sepsis? No, it isn't. Although newborns are relatively deficient in endogenous immunoglobulin, treatment with intravenous immune globulin has no effect on rates of death or disability at two years in neonates with sepsis. In a multicentre randomized trial, 3493 infants receiving antibiotics for suspected or proven serious infection were randomized to receive two infusions of polyvalent IgG immune globulin or placebo 48 hours apart. The rest of the management plan was left to the patient's attending physician.

The rate of death or major disability at two years was the same (39%) in both the treatment (686/1759) and placebo (677/1734) groups. There were also no significant differences in other adverse outcomes, such as chronic lung disease, major cerebral abnormality or number of subsequent episodes of sepsis. The authors conclude that there was no evidence of benefit or harm with use of immune globulin, even when results were adjusted according to risk factors for severity of disease, including preterm birth. See *N Engl J Med* 2011; 365:1201-11.

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