Clinical shorts

Burn size and survival in children: A burn size of around 60% total body surface area in children is an important threshold for morbidity and mortality. This is the conclusion of a prospective cohort study that included 952 children with severe burns (at least 30% of their total body surface area) who were admitted to a single burn centre over a 10-year period. Patients were stratified by burn size in 10% increments and were comparable by age and sex distribution. All received standard care according to established guidelines. A burn area greater than 60% of total body surface area was strongly associated with mortality (odds ratio [OR] 10.07, 95% confidence interval [CI] 5.56 to 18.22), as was inhalation injury (OR 2.97, 95% CI 1.81 to 4.85). Increased burn area, especially if greater than 60%, was also associated with prolonged stay in the intensive care unit, more operations and multiorgan failure. The authors recommend that children with a burn size of greater than 60% total body surface area be transferred immediately to a centre that specializes in burn treatment. See Lancet 2012;DOI:10.1016/S0140-6736 (11)61345-7.

Treating symptomatic uterine fibroids: Uterine bleeding was controlled in most patients with symptomatic uterine fibroids who received daily oral ulipristal acetate or monthly injections of leuprolide acetate for three months. In this double-blind noninferiority trial, 307 premenopausal women with symptomatic fibroids and excessive bleeding who were scheduled for surgery for the fibroids (hysterectomy or myomectomy) were randomized to receive 5 or 10 mg of oral ulipristal daily (plus a monthly intramuscular saline injection) or monthly intramuscular injections of leuprolide acetate (3.75 mg) plus oral placebo daily. Bleeding was controlled in 90% of patients receiving 5 mg ulipristal, 98% receiving 10 mg ulipristal and 89% receiving leuprolide. The differences in control of bleeding between the ulipristal and leuprolide groups were 1.2% (95% confidence interval [CI] –9.3 to 11.8) for the 5 mg group and 8.8% (95% CI 0.4 to 18.3) for the 10 mg group, showing noninferiority for both doses of ulipristal. (The prespecified nonferiority margin was –20%.) Moderate to severe hot flashes were more common in those receiving leuprolide. See *N Engl J Med* 2012;366:421-32.

Enoxaparin or unfractionated heparin during percutaneous coronary intervention: Enoxaparin use during percutaneous coronary intervention (PCI) reduces mortality and bleeding complications compared with unfractionated heparin. Twenty-three trials with a total of almost 31 000 patients were included in a systematic review and meta-analysis of randomized and nonrandomized studies comparing the two anticoagulant agents. About one-third of patients had PCI for ST elevation myocardial infarction, 38.2% after fibrinolysis, and a further 38.7% for non-ST elevation acute coronary syndrome or electively. About 45% received enoxaparin and 55% unfractionated heparin. Compared with unfractionated heparin, enoxaparin was associated with decreased risk of death (relative risk [RR] 0.66, 95% confidence interval [CI] 0.57 to 0.76) and incidence of major bleeding (RR 0.80, 95% CI 0.68 to 0.95). The authors comment that this reduction in mortality was likely due to prevention of ischemic complications. The reduction in mortality and major bleeding was especially marked in those having PCI for ST elevation myocardial infarction. See BMJ 2012:344:e553 doi:10.1136 /bmj.e553.

Acute neck pain: Spinal manipulation therapy is more effective than medication for acute and subacute neck pain; however, a few instructional sessions on home exercise had similar outcomes in this randomized trial that included



272 adults with nonspecific neck pain for 2 to 12 weeks. Patients were randomized to receive three months of spinal manipulation therapy, medications (e.g., nonsteroidal anti-inflammatory drugs, acetaminophen) or two sessions that provided instruction on home exercise. At 12 weeks, participant-rated pain was significantly reduced in the spinal manipulation therapy group compared with the medication group (0.94 greater reduction in mean pain score [0-10], 95% confidence interval 0.37 to 1.51). Differences in pain improvement between the spinal manipulation group and the home exercise group were not statistically significant during the treatment and observational periods (up to one year). Those assigned to the medication group had consistently higher use of medication for neck pain after the intervention phase was completed. See Ann Intern Med 2012;156:1-10.

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