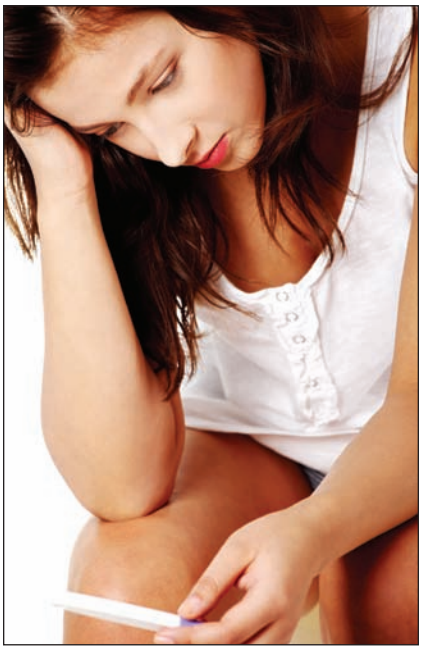
Clinical shorts

Ultrasound-guided corticosteroid injection for plantar fasciitis: A single ultrasound-guided injection of dexamethasone is a safe and effective short-term treatment for plantar fasciitis. This is the conclusion of a controlled trial in which 82 participants with at least eight weeks of heel pain were randomized to receive an injection of dexamethasone or normal saline under ultrasound guidance. All participants also received an ultrasound-guided posterior tibial nerve block with 2% lidocaine before the injection. At four weeks, the dexamethasone group showed greater improvement in pain scores than the placebo group (mean adjusted between-group difference 10.9, 95% confidence interval [CI] 1.4 to 20.4), with a number needed to treat of 2.93 (95% CI 2.76 to 3.12). There were, however, no significant differences in pain scores between the two groups at 8 and 12 weeks, although swelling of the plantar fascia was reduced in the treatment group for up to 3 months. No adverse events were reported. See *BMJ* 2012;344:e3260 doi: 10.1136/bmj.e3260.

Effectiveness of long-acting reversible contraception: The effectiveness of long-acting reversible contraception (i.e., intrauterine devices and implants) is superior to that of contraceptive pills, transdermal patch or vaginal ring, regardless of the age of the user. A large prospective cohort study followed 7486 women between the ages of 14 and 45 years who chose a contraceptive method (a long-acting reversible method or depot medroxyprogesterone acetate [DMPA] injection, pills, patch or ring) and received it at no cost. After three years of follow-up, there were 334 unintended pregnancies; of these, 156 were attributed to failure of one of the contraceptive methods. The contraceptive failure rate among participants using pills, patch or ring was 4.55 per 100 participant years, compared with 0.27 among those using long-acting reversible contraception (adjusted hazard ratio 21.8,



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95% confidence interval [CI] 13.7 to 34.9). Failure rates among participants using DMPA injections were similar to those who used long-acting reversible contraception. The rate of contraceptive failure did not differ significantly according to age group among participants using DMPA injections or long-acting reversible contraception. However, those under the age of 21 years who used pills, patch or ring had almost twice the risk of unintended pregnancy than older women. See *N Engl J Med* 2012;366:1998-2007.

Recombinant tissue plasminogen activator for acute ischemic stroke: People who are given intravenous recombinant tissue plasminogen activator (rt-PA) within six hours after ischemic stroke are more likely to be alive and independent at follow-up than those who do not receive the treatment. Twelve trials of intravenous rt-PA versus control, with 7012 patients, were included in a systematic review and meta-analysis. If given within six hours after stroke, rt-PA significantly increased the odds of being alive and independent at final follow-up (odds ratio [OR] 1.17, 95% confidence interval [CI] 1.06 to 1.29). The earlier the patients were treated, the better the results (OR 1.61, 95% CI 1.30 to 1.99, if rt-PA was given within three hours after stroke). The number of deaths in the first seven days was higher in the treatment group (mostly accounted for by symptomatic intracranial hemorrhage), but by final follow-up, the difference between the two groups was not significant (OR 1.06, 95% CI 0.94 to 1.20). See *Lancet* 2012; doi:10.1016/S0140-6736(12)60738-7.

Urodynamic testing before stress-incontinence surgery: For women with uncomplicated stress urinary incontinence, a basic office evaluation that does not include routine urodynamic testing is most likely sufficient for preoperative workup, say the authors of a multicentre, randomized noninferiority trial. Before their planned surgery for stress incontinence, 630 women were randomized to undergo office evaluation with urodynamic testing or evaluation only. The office evaluation included a provocative stress test (observation for transurethral urine loss with coughing or Valsalva manoeuvre), postvoiding residual urine volume, urinalysis or urine culture, and clinical assessment of urethral mobility. The proportion of those in whom treatment was successful after surgery (based on responses to validated questionnaires) was 76.9% in the urodynamic-testing group and 77.2 in the evaluation-only group (difference –0.3 percentage points, 95% confidence interval –7.5 to 6.9). Although women who had urodynamic testing were more likely to have a change in preoperative diagnosis, this did not result in different distributions of overall surgical treatments. See *N Engl J Med* 2012;366:1987-97.

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