## MINERVA

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A man with hypertension and two murmurs Try the picture quiz in ENDGAMES, p 50

When a woman with hypothyroidism had her dose of thyroxine increased she felt worse, not better. She was tired and developed headaches, nipple discharge, and weight gain. Her thyroid stimulating hormone level was found to be over 100 mIU/L (normal range 0.27-4.2), with low free thyroxine and raised prolactin levels. A scan showed an enlarged pituitary gland. The new dose of thyroxine had been dispensed with a decimal point error—the patient had received a tenth of the appropriate dose. Severe hypothyroidism had over-stimulated the pituitary, causing it to become hyperplastic. It shrank back to normal with the correct dose of thyroxine (Can Med Assoc) 2012;184:210, doi:10.1503/cmaj.111883).

Clopidogrel is converted to its active form through the cytochrome P450 pathway, which also metabolises calcium channel blockers. Some studies conclude that calcium blockers reduce the efficacy of clopidogrel, but results from the CREDO trial suggest otherwise. Patients who were taking calcium channel blockers at the start of the trial and who then started taking clopidogrel enjoyed the same treatment effect (reduced myocardial infarctions, strokes, or death at one year) as those who were not taking calcium channel blockers. No evidence was found for a significant interaction between the two drug types (Circulation Cardiovasc Interventions 2012, doi:10.1161/ circinterventions.111.963405).

An extendable prosthesis for limb salvage surgery in children with bone tumours was designed to preserve the limb and limb length equality even when the growth plates are resected. The prosthesis is lengthened non-invasively by electromagnetic induction in outpatients, without anaesthesia. A seven year review of 34 cases reports lengthening complications in two children, deep infection in six, and local recurrence of cancer in three. Eleven children needed further leg surgery, with amputation becoming necessary in five. The average functional score was 85%. The surgeons say they've shown good leg lengthening but the high incidence of infection is cause for concern (J Bone Joint Surgery (Br) 2012;94-B:265-9, doi:10.1302/0301-620x.94B2.27536).

Post-thrombotic syndrome (pain, heaviness, itching, swelling, varicose veins, and skin discoloration or ulceration) after proximal deep vein thrombosis can be prevented by compression stockings. A randomised clinical trial of thigh

A 76 year old woman had a longstanding erythematous eczematous rash in her left axilla that was unresponsive to topical steroids. Punch biopsy showed extramammary Paget's disease. This is a neoplastic skin condition found covering apocrine glands, commonly in the anogenital region, and sometimes associated with underlying malignancy. Our patient had ipsilateral breast cancer. Both lesions responded in part to an aromatase inhibitor before surgical excision. Lesions can reappear up to 15 years after initial treatment. A hallmark of the disease is the presence of Paget's cells—large intraepithelial cells with copious clear cytoplasm, large nucleus, and prominent nucleolus found in isolation or small clusters, stained with cytokeratin 7.

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length or below-knee stockings for two years in 267 patients found that severe symptoms developed in three patients in each group. Less bothersome symptoms developed in both groups in about a third of patients. Thigh length stockings were less well tolerated and no better than below-knee stockings at preventing postthrombotic syndrome (Blood 2012;119:1561-5, doi:10.1182/blood-2011-11-391961).

Anaesthetists have developed a "serious harm and morbidity" (SHAM) scale to assess placebo nerve block studies in the context of local anaesthesia research (Anaesthesia 2012, doi:10.1111/j.1365-2044-2011.06998.x). Forty-three anaesthetists used SHAM to grade 10 published randomised controlled trials, with concordance that was above random agreement. Agreement was moderate as to whether the studies were low or high risk. Going forward, SHAM should ensure that patients who receive placebo or no treatment will not be subject to any risk of serious or irreversible harm, in line with the Declaration of Helsinki.

Urethral stents typically cause pain along with urgency and frequency of urination, and they attract infection because bacterial biofilms and encrustations form on them. A stent impregnated with triclosan, a broad spectrum antibiotic previously shown to reduce inflammation on skin and in the oral cavity, was no better than a non-impregnated stent at stopping biofilms, encrustations, or infections. It did, however,

significantly reduce several stent related symptoms such as pain (BJU International 2012, doi:10.1111/j.1464-410X.2011.10903.x).

Changes in cerebrospinal fluid (CSF) can indicate Alzheimer's disease at the pre-dementia stage, but the diagnostic performance of CFS biomarkers might drop as people age. A large multicentre study of these biomarkers in a cross-sectional cohort of 529 patients with Alzheimer's disease and 304 controls, and a longitudinal cohort of 750 people without dementia, concludes that the positive predictive value for a combination of biomarkers remains stable with age. The negative predictive value decreased slightly in older people—an effect of an increased prevalence of Alzheimer's disease (Neurology 2012;78:468-76, doi:10.1212/wnl.0b013e3182477eed).

Steve Jobs, one of the founders of Apple computers, was criticised for delaying conventional treatment when he was first diagnosed in 2003 with a rare form of pancreatic cancer. Instead he initially turned to complementary therapies. A surgeon and a professor of complementary medicine write that Jobs only did what many people do in his situation—he assessed what was then known about all possible approaches. But the pickings were thin (Preventive Medicine 2012;54:3-4, doi:10.1016/j.ypmed.2011.12.014). Even those with access to the most resources cannot make informed treatment decisions if the information does not exist.

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