



Bones of the hand II

Try the anatomy quiz in
ENDGAMES, p 50

In focus group discussions and interviews with doctors who qualified outside the United Kingdom and who registered with the General Medical Council in 2006-08, one topic was consistently discussed: the differences in the ethical, cultural, and legal framework for practising medicine between the UK and their country of qualification, especially around the doctor-patient relationship. Most doctors applying to work in the UK discover these differences only once in practice, and the degree of support received depends on the specialty they work in (*Journal of the Royal Society of Medicine* 2012;105:157-65, doi:10.1258/jrsm.2011.110256).

Warm climates, but not humidity, are associated with an increased risk of forming renal stones. In a retrospective study of 599 patients with renal stones, rising ambient temperature was associated with increasing levels of urinary calcium and the supersaturation of calcium oxalate and calcium phosphate, but also with decreasing amounts of urinary sodium (*British Journal of Urology International* 2012, doi:10.1111/j.1464-410x.2012.11186.x).

There have been reports of inflammatory ocular events among patients taking oral bisphosphonates. In a cohort of over 900 000 people taking oral bisphosphonates, including more than 10 000 first time users, researchers reported an incidence rate of 29 and 63 cases per 10 000 person years of uveitis and scleritis, respectively (*CMAJ* 2012;184:E431-4, doi:10.1503/cmaj.111752). These rates compared with 20 and 36 cases per 10 000 person years among non-users, respectively. The authors advised that first time users of oral bisphosphonates should be made familiar with the symptoms of inflammatory eye conditions.

In a double blind crossover exposure study, 45 non-smoking young adults were exposed to diesel exhaust maintained at 200 µg/m³ of fine particulate matter and filtered air for 120 minutes, on days separated by over two weeks (*Hypertension* 2012;59:943-8, doi:10.1161/hypertensionaha.111.186593). Systolic, but not diastolic, blood pressure measurements rose during and after exhaust exposure, with the mean effect peaking between 30 and 60 minutes after exposure began—up by 5.1 mm Hg. Exposure perception, sex, and metabolic syndrome did not modify the effect.



A 68 year old man presented with intractable pruritus affecting the T9 dermatome, having had shingles in the same dermatome three weeks earlier. Examination showed a well defined eczematous patch, abruptly demarcated in the midline, with lateral scarring from the preceding episode of shingles. Post herpetic pruritus was diagnosed, and the patient responded to treatment with potent topical steroids. Unlike post herpetic neuralgia, pruritus is an under-reported consequence of *Herpes zoster* and can present with secondary eczematization from repeated excoriation. Sensations of pain and pruritus are both transmitted by unmyelinated C fibres. Patients with severe disease should be treated with gabapentin or amitriptyline.

T Maruthappu, specialist trainee year 5, dermatology
S Punjabi, locum consultant dermatologist, Department of Dermatology, Charing Cross Hospital, Imperial College NHS Trust, London W6 8RF, UK
Patient consent obtained.

Cite this as: *BMJ* 2012;344:e3612

After combining data from 16 studies of the effects of vitamin D supplements in food using a random effects analysis, researchers showed that a person's mean intake of about 11 µg/day (440 IU/day) from fortified foods increased concentrations of 25-hydroxyvitamin D by 19.4 nmol/L. All the studies included adult participants living in the community. The authors stated that safe and effective food based strategies could prevent vitamin D deficiency, with potential benefits for public health (*Journal of Nutrition* 2012;142:1102-8, doi:10.3945/jn.112.158014).

Researchers measured concentrations of two common cardiac biomarkers—troponin I and N terminal pro-B-type natriuretic peptide—when patients were randomised into the RE-LY study of long term anticoagulation for atrial fibrillation (*Circulation* 2012;125:1605-16, doi:10.1161/circulationaha.111.038729). Concentrations of biomarkers correlated positively with risk of stroke and death, and seemed better at predicting thromboembolic risk in atrial fibrillation than currently used clinical risk scores such as CHADS₂ or CHA₂DS₂-VASc.

A pilot study of functional magnetic resonance imaging has shown that fat intake influences cerebral blood flow in the homeostatic and gustatory brain areas (*American Journal of Clinical Nutrition* 2012;95:1342-9, doi:10.3945/ajcn.111.031492). Researchers measured cerebral blood flow in 11 healthy men before and 30 and 120 minutes after intake of high

and low fat yoghurts. High fat yoghurt brought about significantly reduced blood flow in the hypothalamus and insular cortex, which correlated with participants' hunger ratings and could have contributed to efficient energy homeostasis.

The hypothesis that raised levels of glycated haemoglobin correlate with an increased prevalence of frozen shoulder in people with diabetes has not been confirmed in a retrospective review of over 200 000 diabetic patients (*Journal of Bone and Joint Surgery* 2012;94:919-23, doi:10.2106/JBJS.J.01930). However, increased risk of frozen shoulder was associated with insulin use compared with non-use, use of oral hypoglycaemic drugs compared with diet management only, and duration of diabetes (after controlling for insulin use).

Prescribed drugs worth an estimated £450m (€556m; \$710m) million are thrown away each year in the United Kingdom. About 1% of dispensed items are eventually returned to a pharmacy or dispensing general practice—unused or partly used. Recycling of drugs is regarded as unsafe in the UK, and donations abroad are not encouraged. The World Health Organization's guidance on medicine donations states that there should be no double standards—recycling is not an option for domestic or overseas use (*Drug and Therapeutics Bulletin* 2012;50:49, doi:10.1136/dtb.2012.05.0100).

Cite this as: *BMJ* 2012;344:e3613