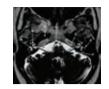
MINERVA

Send comments or suggest ideas to Minerva: minerva@bmj.com



High resolution axial T2 weighted magnetic resonance imaging of the posterior fossa Try the anatomy quiz in ENDGAMES, p 38

A 52 year old man with longstanding symmetrical digital shortening and severe radiographic acro-osteolysis was referred for a suspected inflammatory rheumatic condition. He had no relevant occupational history or features of psoriatic arthropathy or scleroderma. He had undergone surgery for a cervical meningocele when 4 years old. Examination showed accidental skin wounds, shortening of distal phalanges with redundant soft tissue, and a distal sensorimotor neuropathy of upper limbs. Acro-osteolysis may be caused by psoriatic arthritis, scleroderma, chronic vascular insufficiency, or occupational injury. It may also be idiopathic or, as in this case, secondary to neuropathy after a cervical meningocele and repair. Lauren Mitchell (Lauren.mitchell1@nhs. net), core medical trainee year 1, R Klocke, consultant rheumatologist, Sophie Maxwell, foundation year 1 doctor, Department of Rheumatology, Russells Hall Hospital, Dudley DY1 2HQ, UK Patient consent obtained. Cite this as: *BMJ* 2014;348:g473



There are people out there trying to sell heroin for kids as young as 2 years to snort. And a good thing too, perhaps. A new intranasal preparation of diamorphine has just been undergoing safety trials in eight UK hospitals for children aged 2-16 with fractures or other acute trauma. In a manufacturer sponsored open label trial, it appeared free from major harm (*Emergency Medicine Journal* 2014, doi:10.1136/emermed-2013-203226).

In Paradise Lost (Milton, 1667), Chaos is deemed no fit partner for anybody but Satan. Minerva is a goddess who loves order and shares Milton's view. She felt most uncomfortable when the chaos theory was fashionable and is glad to see that it has largely disappeared into journals such as *Chaos* or *Journal of Chaos*. She raises her helmet to an article (*American Journal of Epidemiology* 2014, doi:10.1093/aje/kwt310) debunking a novel case series method dubbed the "case-chaos" design. Moving through some sophisticated analysis, the authors conclude that "while the proposers of the case-chaos method view it as a useful adjunct, we show that it cannot produce sensible estimates."

Enter "sore throat antibiotics" on Google and you will get 142 million results, or if you try Medline you will get more than 4000. The latest contribution to this superabundant literature comes from many of the top names in British primary care research, who describe results from a prospective cohort of 11 950 adults presenting with sore throat (*Lancet Infectious Diseases* 2014; doi:10.1016/S1473-3099(13)70294-9). Just 1.4% of them developed complications, mainly otitis media or sinusitis, and the number needed to treat (NNT) with immediate antibiotics to prevent complications was 193. However, to prevent a return consultation for persistence of symptoms

rather than complications, a delayed prescription of antibiotics had a NNT of 18. Minerva wonders if there should now be a moratorium on further research on antibiotics for sore throat until existing findings have been mulled over and used to inform shared decision making with patients.

Veterans of the US Armed Forces must be the most studied group of warriors in the world. A study in the American Journal of Hypertension (2014, doi:10.1093/ajh/hpt241) looked at 10202 male veterans of mean age 60 years who were on treatment for high blood pressure, and followed them up for 10 years to study their mortality risk according to initial levels of fitness and whether they were taking statins. Survival of the fittest was proved once again: those who were initially in the highest quartile of peak exercise capacity showed a 52% lower mortality risk when compared with the least fit subjects taking statins. But once again, statin use was associated with a risk reduction of about a third across all groups.

Guidelines on the management of urinary tract infections in babies and children have changed considerably over the past two decades. The authors of an observational study in Archives of Disease in Childhood (doi:10.1136/ archdischild-2013-304428) state that they could not have completed their investigation if they had been made to follow the latest National Institute for Health and Care Excellence guidance. This would have been a pity, because it shows that the active management service for childhood urinary tract infection that they ran in Newcastle (UK) was associated with a halving of renal scarring on follow-up. Minerva admits the limitations of this before and after study, but she also respects the value of looking at service models that work.

Of all the drugs used to lower glucose in type 2 diabetes, metformin has suffered the least damage to its reputation over recent years. In addition to its cardiovascular safety, metformin is associated with a reduced risk of new cancers in patients who take it for diabetes, and a recent meta-analysis (The Oncologist 2013;18:1248-55, doi:10.1634/ theoncologist.2013-0111) suggests that it may also help to improve survival in patients with diabetes who have established cancer. The hazard ratio for all cause mortality in mixed populations of patients with cancer who were taking metformin over various periods of follow-up was 0.66, and for cancer specific mortality it was 0.62. A safe drug that might improve cancer survival by a third seems worth further investigation in people without diabetes.

Guideline committees love to issue guidance. They also like to cover their backs. When a "broad panel of international rheumatologists" met in 2008 (Annals of Rheumatic Diseases 2009;68:1086-93, doi:10.1136/ard.2008.094474), they decided that men who were taking low dose methotrexate (MTX) for rheumatological disease should stop taking it for three months before trying to father children. But investigators from the Pharmakovigilanz- und Beratungszentrum für Embryonaltoxikologie at Charité Universitätsmedizin Berlin found no difference in pregnancy outcomes when 113 pregnancies with paternal low dose MTX treatment were compared with 412 non-exposed pregnancies (Rheumatology 2013, doi:10.1093/rheumatology/ ket390). "The reassuring findings do not support the necessity of a 3-month MTX-free interval until conception. In the case of unavoidable paternal MTX therapy, it seems reasonable not to postpone family planning."

Cite this as: BMJ 2014;348:g1079