MINERVA

Did you know that Babinski's legacy was two clinical signs? The abnormal plantar reflex is the one we all know and love. The second is seen in patients with hemifacial spasm. It occurs when the orbicularis oculi muscle contracts, closing the eye, with the internal part of the frontalis muscle contracting at the same time so that the eyebrow rises when the eye closes. It's apparently impossible to reproduce this effect voluntarily, and it's used to distinguish between hemifacial spasm and blepharospasm (*Neurology* 2007;69:402-4).

Crime scene investigators look for prints from the palm, foot, ear, and lip as well as the traditional fingerprint. Invisible lip marks are possible to develop given the increasingly common use of protective and permanent lipsticks, and lysochromes such as Sudan Black are good at developing recent but invisible lip marks that contain lipstick on dead skin. Fluorescent dyes are just as useful, and they may also reveal lip marks not created by lipstick (*Journal of Forensic and Legal Medicine* 2007;14:340-2).

To tackle the problem of faulty research citations and their negative influence on the growth of scientific knowledge, journals should consider including a section on their websites where relevant papers that have been overlooked by authors can be cited and where it can be shown how omitted papers relate to the published one. This is one of the suggestions made in a paper entitled Verification of Citations, Fawly Towers of Knowledge? (http://mpra.ub.uni-muenchen.de/4149/01/MPRA_paper_4149.pdf). It makes depressing reading for anyone interested in the accuracy of what is reported in journals.

The species legionella lives mostly in water, so unsurprisingly more rainfall is associated with more risk of legionnaire's disease. A sharp rise in the disease in the mid-Atlantic region in 2003 coincided with a period of record breaking rainfall (*Epidemiology and Infection* 2007;135:811-7). The average increase in rainfall from May to September 2003 rose to 15.7 cm from 10.4 cm, which corresponded to an increased risk of legionnaire's disease of about 14.6%. Doctors in England might bear this in mind in the next few weeks.

A 12 year old girl of Pakistani origin, who was born and brought up in the United Kingdom, presented with a one month history of an indurated area, which measured 2.5×2.5 cm, over the bridge of her nose. She had visited Pakistan in the previous six months. She was treated with two courses of flucloxacillin by her general practitioner, with no clinical improvement. A skin biopsy taken at the time of presentation at hospital showed intracytoplasmic inclusion bodies, which led to a diagnosis of cutaneous leishmaniasis. She was treated with intravenous stibogluconate. Cutaneous leishmaniasis is occasionally seen in the UK and should be considered in patients who present with unusual skin lesions, particularly if they have a history of foreign travel.

M Hashir Ariff (hashir_a@hotmail.com) specialist registrar, department of paediatrics, Royal Surrey County Hospital, Guildford, Surrey GU2 7XX

Another paper that analyses the quality of scientific research says that even use of the randomised controlled trial—the supposed optimal design of trials—doesn't ensure high quality research or reporting (*Journal of Bone and Joint Surgery Am* 2007;89:1693-9). In their review of 54 randomised trials of treatment for tennis elbow, the two reviewers found many areas of deficiency, including poor descriptions of recruitment, poor power calculations, and poor randomisation and blinding as well as inadequate follow-up. Scientists, they say, must adhere to the CONSORT (Consolidated Standards of Reporting Trials) criteria.

The pleasure we get from eating, rather than our need for food, might be explained by the appetite suppressing hormone leptin. Leptin, previously thought to increase satiety, also seems to reduce the pleasure associated with food (*Science* 2007 Aug 9). Two patients with congenital deficiency in leptin found that they felt full sooner and craved food less after being treated with leptin. Brain imaging indicates that leptin produces the rewarding effects of food by acting on the ventral striatum, which is part of the limbic system.

A traditional Chinese herbal concoction referred to as an "ancestral formula" containing *Flos loniceræ*, *Herba menthae*, *Coretex moutan*, *Rhizoma atractylodis*, and *Cortex phellodendri* was put to the test in a randomised, double

blind, placebo controlled study in children with moderate to severe atopic dermatitis (*British Journal of Dermatology* 2007;157:357-63). Two doses a day were efficacious in improving quality of life and reduced the need for topical steroids and were palatable.

Can we synthesise natural products? And if so can we make them even better? Many important drugs are natural substances that require complicated artificial development. Two independent research groups have shown that it is possible to create complex natural products by mixing the naturally found enzymes needed to make them with artificial chemicals in a laboratory (*Nature Chemical Biology* 2007 Aug 12). The end products have potential antibacterial and anti-tumour activity and may be important in future development of drugs.

"Assortative mating" is the non-random mating of individuals because of phenotype and cultural factors. It's one of the things thought to have contributed to the current epidemic of obesity—obese people have mated with other obese people. Researchers propose in the *American Journal of Clinical Nutrition* that assortative mating's influence has come about because the age at which obesity develops has shifted progressively earlier, allowing single people in their teens and early 20s to more easily distinguish partners with obese and lean phenotypes (2007;86:316-23).