

# MINERVA



**A 55 year old woman with fatigue of about four months and breathlessness of one month. Try the picture quiz in ENDGAMES, p 717**

Frequent headaches in children are possibly more of a problem than once thought. A study showed that in a general population of pre-adolescents in Brazil, the prevalence of chronic daily headaches was 1.68%—more in girls than boys—and high-frequency episodic headaches was 2.52%. Both sorts of headaches are more common in non-white children and were seen in children as young as five years old. School staff are poorly trained to identify and treat these children. The outcome for many is often learning problems, anxiety, and disability (*Neurology* 2010;74:903-8 doi:10.1212/WNL.0b013e3181d561a2).

People are at risk of developing Alzheimer's if they have a parent with the disease, a study has shown. The study of cognitively normal people with a parent with late onset Alzheimer's, using positron emission tomography scans, revealed increased fibrillar amyloid beta deposition in the healthy subjects. This is a pathological hallmark of Alzheimer's. People with affected parents, notably their mothers, had more fibrillar amyloid beta in parts of the brain vulnerable to Alzheimer's, than control subjects. The authors suggest their findings may motivate more research into familiar transmission and parent-of-origin effects in late onset Alzheimer's (*Proceedings of the National Academy of Sciences* 2010; doi:10.1073/pnas.0914141107).

Transplanting progenitor cells from bone marrow directly into the thymus may overcome what happens when patients with severe combined immunodeficiency receive haematopoietic stem cell transplantation. The development of late defects in T cell differentiation is thought to be a result of insufficient entry of donor bone marrow progenitors into the thymus. When intra-thymic administration of progenitors was performed in mice, the result was a major level of donor derived thymopoiesis that lasted more than six months after the transplantation. This might be a good strategy for enhancing T cell differentiation in people with severe combined immunodeficiency (*Blood* 2010;115:1913-20 doi:10.1182/blood-2009-06-229724).

Elderly patients with atrial fibrillation might also have some degree of cognitive dysfunction. These people are less likely to be effectively anti-coagulated and are also at risk of more vascular events and bleeding. An analysis of cognitive function associated with the “time in therapeutic range” of anti-coagulation agents found that the lower the Mini-Mental State Examination scores,



This woman was referred for investigation of recurrent episodes of erythematous swelling and itchiness around her left eye. Her medical history was unremarkable apart from mild asthma. Pyrexia and signs of orbital cellulitis were never evident and routine screening blood tests and a computed tomography scan of her orbits and sinuses were all normal.

Eventually she discovered her symptoms were triggered when she wore new glasses that she had obtained six months earlier, with a nickel snake motif on the sides. The motif only came into contact with her skin on the affected side and all her symptoms ended when she stopped wearing them altogether. She recalled previous problems with a necklace which gave her intense itchiness and chest tightness requiring admission to coronary care.

**Dimple Patel** (dimple.patel@doctors.org.uk), specialist registrar, **Rosie Brennan**, consultant, Department of Ophthalmology, Altnagelvin Hospital, Londonderry, Northern Ireland BT47 6SB  
Patient consent obtained.

Cite this as: *BMJ* 2010;340:c1593

the more extra efforts are needed to maintain effective anti-coagulation. The Mini-Mental State Examination is a good tool to identify such patients (*Circulation cardiovascular quality and outcomes* 2010; doi:10.1161/circoutcomes.109.884171).

With obesity on the rise, the results of a survey of NHS maternity service provision for obese women from the Centre for Maternal and Child Enquiries are timely. The survey, with a response rate of 88%, shows that most maternity units routinely provide care to women with obesity, but 44% do not have local guidelines. Extra wide chairs, wide ward beds, and in some cases wide operating theatre tables are not immediately accessible. However, many maternity units say they have a list of available manual handling equipment suitable for large women. Home births are generally vetoed for women with a body mass index greater than 35 (*CMACE/RCOG Guideline* March 2010).

Teenage workers in the US are only partially protected from violations at work by work permits. A self reported survey of just under 850 working teenagers in 16 schools in South Carolina, found that the issuing of work permits protected them from being asked to perform illegal hazardous tasks, but did not protect them from work hour violations (*American Journal of Public Health* 2010;100:635-7 doi:10.2105/AJPH.2009.160812).

Minerva would rather eat her way to cleaner carotid arteries than take medication, if she had a choice. A two year dietary intervention controlled trial had participants randomised to low-fat, Mediterranean, or low-carbohydrate diets. Their carotid artery intima-media thickness and carotid vessel wall volumes were monitored using sophisticated ultrasound technology. At the end of the study, participants who demonstrated regression in their carotid vessel wall volumes, rather than progression, had achieved greater weight loss and a greater reduction in systolic blood pressure. There were no differences across the three diets (*Circulation* 2010;121:1200-8 doi:10.1161/circulationaha.109.879254).

In the wake of the H1N1 pandemic, a systematic review of face masks to prevent transmission of influenza viruses reveals some evidence to support the wearing of masks or respirators during illness to protect others. Far fewer studies support the use of masks or respirators to prevent becoming infected. Most are set in controlled and not natural environments and the findings remain the same whether in healthcare or community settings (*Epidemiology & Infection* 2010;138:449-56 doi:10.1017/S0950268809991658).

Cite this as: *BMJ* 2010;340:c1586