

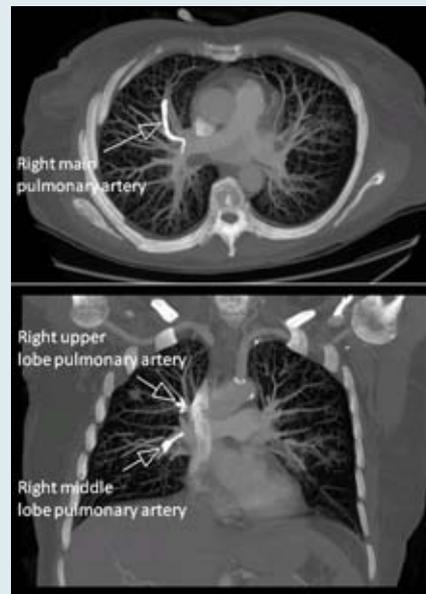
A woman with episodic headaches, sweating, and palpitations
Try our picture quiz in ENDGAMES, p 49

A study of post-traumatic stress disorder and its possible relation to impaired physical health in German adults aged 60 to 85 is published in *Psychosomatic Medicine* (2011;73:401-6, doi:10.1097/PSY.0b013e3181b47e8). In the representative sample from the general population, the researchers found significant associations between current post-traumatic stress disorder and cardiovascular diseases, cardiovascular risk factors for peripheral vascular disease, asthma, cancer, back pain, hearing loss, osteoporosis, stomach problems, and thyroid disorders.

People of African-Caribbean origin may have increased rates of dementia. A study from a general practice in London found that the prevalence of dementia in older people who'd migrated from a Caribbean island or Guyana was 10%, compared with 7% in their white UK born counterparts, after adjusting for the confounders age and socioeconomic status. Additionally, African-Caribbean people with dementia were on average nearly eight years younger than white people with dementia (*British Journal of Psychiatry* 2011;198:1-7, doi:10.1192/bjp.bp.110.086405).

Why do patients who've sustained global cerebral oedema after subarachnoid haemorrhage do so badly? A prospective observational study explored the mechanisms in 39 consecutive patients with poor grade subarachnoid haemorrhage. It found that those with global cerebral oedema on admission had a higher incidence of metabolic crisis in the first 12 hours of monitoring and during neuromonitoring, compared with those without global cerebral oedema. But there was no difference in brain tissue oxygen tension or brain perfusion pressure between the two groups (*Stroke* 2011; 42:1534-9, doi:10.1161/strokeaha.110.604488).

Metal oxide nanoparticles injected into tumours in mice and then heated up by exposing them to radiofrequency waves successfully destroyed the tumour. By comparison, a standard chemotherapy treatment was not so effective. The scientists behind the experiment say it was the very high efficiency with which the nanoparticles converted the absorbed waves into heat that did the trick, and they achieved this by building nanoparticles from two different magnetic materials in a core-shell arrangement (*Nature Nanotechnology* 2011, doi:10.1038/nnano.2011.95).



A 61 year old woman with back pain was diagnosed with a pathological fracture of the T10 vertebra. She underwent vertebroplasty and bone biopsy and was diagnosed with stage IV diffuse large B cell lymphoma. She later presented with dyspnoea, and chest computed tomography identified dense radio-opaque material in the right main pulmonary artery and right middle lobe pulmonary artery, and a pulmonary embolism in the right lower lobe pulmonary artery. Complications of vertebroplasty include cement leakage into the perivertebral venous system with the potential risk of migration resulting in cement emboli. She received anticoagulation for both emboli with low molecular weight heparin.

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Domestic violence brings a whole raft of health consequences in its wake. A new study reports that antenatal domestic violence is linked to antenatal and postnatal depression, and that children born to women who have experienced such violence are more likely to have behavioural problems. Antenatal violence was more commonly reported in the mothers of children who displayed poor behaviour at three and half years of age (11%) than in mothers of children with no problems (7%). Typical childhood problems were hyperactivity and trouble with emotions and conduct (*BJOG* 2011, doi:10.1111/j.1471-0528.2011.03040.x).

Babies as young as 16 months seem to be able to infer whether the problem with a malfunctioning toy is more likely to lie with the toy itself or with how they are playing with it. The study involved red, yellow, and green toys and an experimenter who pushed a button on the green toy, which then played music. Babies were then offered the yellow or green toy, and encouraged to push the button themselves. When the green toy didn't play music, they handed it to their parents. When the yellow toy failed, they were more likely to reach for the nearby red toy (*Science* 2011;332:1524, doi:10.1126/science.1204493).

Using isolated sutures to fix patellar tendon disruption associated with total knee arthroplasty doesn't work, and reconstruction techniques offer variable results. A new technique involving synthetic mesh reconstruction is described in the *Journal of Bone and Joint Surgery* (2011;93:1137-43, doi:10.2106/JBJS.J.01036). A pilot study involving 13 patients who underwent extensor mechanism reconstruction for subacute or chronic patellar tendon disruption after knee replacement found that the mesh provided a straightforward, successful, and durable surgical procedure in all but three cases and eliminated the risk of disease transmission.

A 66 year old woman who presented with a worrying collection of symptoms, including flinging her bedsheets to the floor at night, was finally admitted to hospital with a tentative diagnosis of Creutzfeldt-Jakob disease. An electroencephalogram and mildly deranged thyroid function tests eventually suggested a moderate encephalopathy associated with autoimmune thyroiditis. She was treated with oral steroids and recovered. The neuropsychiatric features that caused the diagnostic confusion were probably brought about by an inflammatory process (*QJM* 2011;104:607-8, doi:10.1093/qjmed/hcq156).

A primary care intervention that sought to close the gap between evidence based goals and clinical practice in patients with heart disease reduced deaths at 10 years. The intervention was a deliberate intensification of lipid lowering. The mortality rate at 10 years in the intervention group of general practitioners was 22% compared with 44% in the control group. The intervention group mortality was similar to the 23% seen in patients treated by hospital specialists (*Annals of Family Medicine* 2011;9:211-8, doi:10.1370/afm.1248).

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