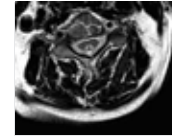


# MINERVA

Send comments or suggest ideas to Minerva: [minerva@bmj.com](mailto:minerva@bmj.com)



## A 73 year old man with tingling fingers

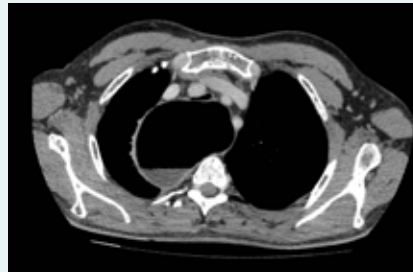
Try the picture quiz in  
ENDGAMES, p 38

Clopidogrel has brought great wealth to its manufacturers, but envious competitors have sought to stain its reputation by using data from in vitro studies to argue for an interaction with commonly prescribed drugs, such as proton pump inhibitors. In this way, more than 8000 academic papers have been generated, and companies have developed platelet testing kits, genotyping products, and competing thienopyridine antiplatelet drugs. But when these have been brought to trial against simple fixed dose clopidogrel they don't affect outcomes. And as prospective trials have tested the interaction with proton pump inhibitors, its clinical significance has disappeared, as shown in a new systematic review (*Heart* 2013;99:520-7; doi:10.1136/heartjnl-2012-302371). So, beware of mechanistic reasoning.

The only oral hypoglycaemic agent that doesn't make outcomes worse is metformin, and even that hasn't been proved. Yet it may have true benefits. In a nationwide case-control study from Taiwan, this drug seems to decrease the risk of hepatocellular carcinoma in a dose dependent manner (*Gut* 2013;62:606-5; doi:10.1136/gutjnl-2011-301708). As for the latest class of antidiabetes drugs, the incretin mimetics, a post mortem study in *Diabetes* (2013 published online 22 March, not yet in print; doi:10.2337/db12-1686) showing widespread pancreatic abnormalities leads Minerva to think that the wrathful thunderbolts of her father Jupiter may soon be loosed upon these substances.

Adalimumab is currently very expensive, but it blocks tumour necrosis factor  $\alpha$  in a unique way and will probably be used long term in an increasing number of patients with rheumatoid arthritis, juvenile idiopathic arthritis, ankylosing spondylitis, psoriasis, and Crohn's disease. In a survey of 23 458 patients who took part in trials throughout the world, adalimumab proved remarkably safe after a mean of about 12 years' use (*Annals of the Rheumatic Diseases* 2013;72:517-24; doi:10.1136/annrheumdis-2011-201244). Infections increased, but cancers and mortality remained at general population levels.

All children get fevers, and until the last century they often died. As serious sepsis gets rarer, we have to look for it harder, and one sign can be a prolonged capillary refill time ( $\geq 3$  sec).



A 39 year old fit and well man attended casualty with a first presentation of stridor after eating a banana, which resolved spontaneously. Computed tomography confirmed oesophageal dilation and tracheal compression in keeping with achalasia.

Achalasia typically presents with dysphagia and regurgitation. Stridor is a rare but recognised presentation. The cricopharyngeal sphincter acts as a one way valve, allowing air to enter the oesophagus during inspiration but none to escape during expiration. Distension of the oesophagus impinges on the posterior membranous portion of trachea causing airway obstruction. In an emergency, decompressing the oesophagus with a nasogastric tube would prove life saving.

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But which capillaries should be assessed? Those on the finger and the sternum empty at different rates, and doctors who want to do the job properly should choose either site, record which, press it for 5 seconds, and then count aloud until it refills (*Archives of Disease in Childhood* 2013;98:265-8; doi:10.1136/archdischild-2012-303046).

Azithromycin has become the chest physician's favourite antibiotic and is widely used to prevent infective exacerbations in chronic obstructive airways disease. A small Belgian double blinded trial looked at its effect on severe exacerbations and lower respiratory infections in adults with severe asthma (*Thorax* 2013;68:322-9; doi:10.1136/thoraxjnl-2012-202698). It found little effect in patients with high blood eosinophil counts, but a significant benefit in those without eosinophilia.

Over the past couple of decades, there has been much interest in the heart as an endocrine organ. The natriuretic peptides are the stars of the show, providing an easy way to measure atrial or ventricular strain, but there are many others, including catestatin (*Postgraduate Medical Journal* 2013;89:193-6; doi:10.1136/postgradmedj-2012-131060). This may sound like something that vets use to lower feline cholesterol, but it's actually a peptide released at the time of acute myocardial infarction that is associated with adverse ventricular remodelling.

The admirable people of the Netherlands sometimes need help in coping with life and end up on long term benzodiazepines. The Calvinist view is that they are then forever doomed to dependency and to increasing their dosage. Yes, they may be condemned to dependency, but then so also are most people who take serotonin reuptake inhibitors. But a study from Dutch primary care shows that dosage does not drift upwards in chronic benzodiazepine users (*Family Practice* 2013; doi:10.1093/fampra/cmt010).

For demyelination, it matters when you are born. April is the cruellest month, bringing forth multiple sclerosis in 5% more than the average, whereas if you are born among the mists and mellow fruitfulness of October and November, your risk is lowered. There is a latitude effect as well—all grist to the mill of the maternal vitamin D hypothesis of multiple sclerosis causation (*Journal of Neurology, Neurosurgery, and Psychiatry* 2013;84:427-32; doi:10.1136/jnnp-2012-303934).

Minerva is very fond of her little owl, *Athene noctua*, and although this owl is immortal like herself, breeding owls are needed to replenish the stock of mortal birds. Such owls can be hard put to choose which of their hungry chicks to feed and so resort to favouritism. Diurnal birds often use beak colour to choose among their fledglings, but this was thought impossible for owls. Not so, according to *Oecologia* (2013 published online 27 Feb, not yet in print; doi:10.1007/s00442-013-2625-8). Parent birds with large broods of *A noctua* can see enough in the dark to favour their children with orange beaks. It is a cruel world for pale beaked owlets desperate for a scrap of minced vole.

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