

Carpohology by A Fo Ben



doi:10.1136/practneurol-2013-000726

GROW YOUR OWN BRAIN

The potential for stem cell treatments in neurological disease has yet to reach its full potential. A recent study in *Nature* has taken this technology to the next level by growing whole brains in vitro. The brains, termed organoids, grew to a size equivalent to a 9-week fetus, but were incapable of thought. Organoids derived from stem cells from a patient with microcephaly showed premature neuronal differentiation, suggesting that this approach can model human diseases that are difficult to study in animal models.

Lancet 2013;382:100.

PUBLICITY ON THE BRAIN

The importance of communicating neuroscientific findings to the wider public has never been higher. Public understanding of—and interest in—advances in neuroscience is a prerequisite for major grant-awarding bodies' funding, but is also vital to allow research to continue and for the findings to have maximal benefit. A recent article in *Neuron* reviewed media coverage of neuroscience over the last 10 years. The authors concluded that neuroscientific coverage could be summarised into three key themes: how brain function can be maintained; how differences in brain function can explain differences between people (particularly along gender lines); and how neuroscience can give biological credence to pre-

existing beliefs. Brain science is an increasingly powerful tool to support an argument, but if your research does not seem to fit into any of those categories, then it is time to widen the public discussion.

Neuron 2012;74:220–6.

HOW LOW CAN YOU GO?

Reducing blood pressure reduces stroke risk in the long term, but what are the benefits of acutely lowering it after acute cerebral haemorrhage? A recent randomised controlled trial of 2794 patients studied the effects of reducing systolic pressure to below 140 mm Hg within 1 h of the event compared with standard treatment, aiming for a systolic pressure of below 180 mm Hg. Aggressive treatment did not lower the rates of death or serious disability, but functional outcomes were better for those left less severely impaired. With a comparable number of non-fatal serious adverse events between the two groups, this study suggests that aggressive treatment may be warranted in this population.

NEJM 2013;368:2355–65.

THE FAST AND THE SPURIOUS

It is said that the way to a man's heart is through his stomach. *The Lancet* extends this proverb—the way to diagnose covert malignant arrhythmia is through prolonged fasting. Recurrent blackouts in Ramadan in a Muslim male who

was observing religious fasting were ascribed to a number of benign mechanisms. However Talib and van de Poll were alert to the polymorphic ventricular tachycardia captured during a witnessed event shortly after admission (figure 1A). They then diagnosed Brugada type 1 through the routine ECG (figure 1B) and sited a defibrillator. High vagal tone and autonomic activity following a large meal was the presumed mechanism, putting those who feast and fast, such as dieters, religious observers and shift workers, at risk of uncovering their undiagnosed Brugada.

Lancet 2013;382:100.

DANCING TO A DIFFERENT TUNE

A number of slightly less-than-orthodox approaches to the treatment of Parkinson's disease have been suggested in recent years (see Carphology *passim*). A recent randomised controlled trial compared the effectiveness of Irish Dancing and standard physiotherapy in a group of 24 patients from Venice. Both treatments were safe in this group, but those studying dancing showed lower rates of gait freezing, balance problems and motor disability than those receiving physiotherapy after 6 months. A new addition to the Venetian Carnivale perhaps?

BMC Geriatrics 2013;13:54.

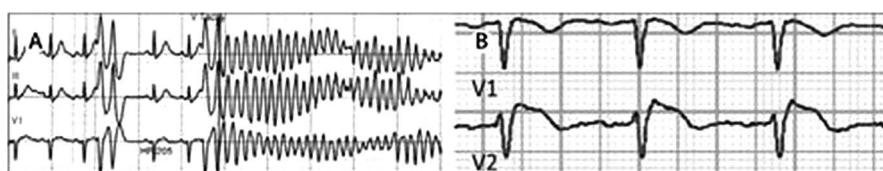


Figure 1 (A) Polymorphic ventricular tachycardia associated with loss of cardiac output. (B) Coved ST segment elevation (V1 and V2).