



DOUBLE BLIND LEADING THE BLIND

Minocycline is a tetracycline antibiotic commonly prescribed for acne, but could it help slow the progression from a clinically isolated syndrome to multiple sclerosis? One hundred and forty-two people were randomised in a Canadian trial to antibiotic or placebo. The primary end point—conversion at 6 months—was less likely in the treated group (33% vs 61%, 95% CI 11.4 to 43.9). Adjusting for enhancing lesions at baseline reduced the size of the effect, but it remained significant. Frustratingly, this difference was not maintained at 2 years, and of course, there were more reportable drug reactions in the minocycline-treated group.

N Engl J Med 2017;376:2122–2133.

EAR WORM

A Fo Ben has oft joined in with colleagues who yearn for a temporary tapeworm to keep the middle aged spread at bay. Be *very specific* with what you wish for, lest you receive a *Spirometra erina-ceiueuropaei* infestation—as a team from Cambridge UK identified. It's a bit like the old joke, 'What is worse than a worm in the brain? A migrating worm in the brain'.

Genome Biology 2014;15:510.

MAGIC BULLET?

When there is a near state of emergency in America regarding the opioid crisis, this report of a novel pain agent that may be side-effect free is very welcome indeed. Clodronate is a first-generation bisphosphonate. Japanese researchers showed that it significantly attenuates neuropathic and inflammatory pain, in mice, via inhibition of a vesicular nucleotide

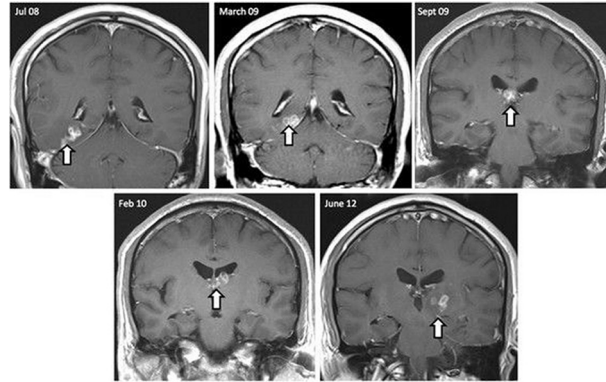


Figure 1 Coronal MR scans of brain show the movement of the tapeworm in the man's head over time. Photograph: Bennett *et al.* *Genome Biology* 2014.

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transporter (VNUT). VNUT is a key molecule for the initiation of purinergic chemical transmission and is involved in the immune response *in vivo*.

Proc Natl Acad Sci U S A 2017;114(31): E6297–E6305.

YOU'LL EITHER LOVE THIS, OR YOU'LL HATE THIS

What has the study of common genetic variants ever done for us? Proving that genome-wide association studies may be better suited to the study of traits than diseases, researchers have identified 15 polymorphisms that influence the likelihood of an individual liking Marmite. A Fo Ben is sympathetic to readers outside the British Isles, so if in Australia think Vegemite, Switzerland Cenovis and Germany Vitam-R. Or if you are not fortunate enough to have the correct pattern of gene changes, think of rancid vulcanised rubber (but on toast).

BioRx iv 2017. Sept 7 (doi:10.1101/185629).

EVERYBODY'S FREE (TO WEAR SUNSCREEN)

The curious latitude-related incidence of multiple sclerosis has inspired a panoply of theories,

including much research in to the role of vitamin D in the aetiology of multiple sclerosis. How does suntan lotion exposure affect your chances of developing multiple sclerosis? Or more specifically the chances in an experimental autoimmune encephalomyelitis (EAE) mouse model. Some forms of commercially available sunblock were able to prevent EAE progression when compared with mice exposed to ultraviolet radiation who did not 'slip, slap, slop'. The researchers identified that the key ingredients in the best performing lotions were homosalate and octisalate. Could salates halt the progression of multiple sclerosis in man?

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Provenance and peer review

Commissioned; internally peer reviewed.

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REFERENCES

- 1 Metz LM, Li DKB, Traboulsee AL, *et al.* Trial of Minocycline in a Clinically Isolated Syndrome of Multiple Sclerosis. *N Engl J Med* 2017;376:2122–33.
- 2 Bennett HM, Mok HP, Gkrania-Klotsas E, *et al.* The genome of the sparganosis tapeworm *Spirometra erinaceieuropaei* isolated from the biopsy of a migrating brain lesion. *Genome Biol* 2014;15:510.
- 3 Kato Y, Hiasa M, Ichikawa R, *et al.* Identification of a vesicular ATP release inhibitor for the treatment of neuropathic and inflammatory pain. *Proc Natl Acad Sci U S A*. [Epub ahead of print Jul 18 2017].
- 4 Roos T, Kulemin N, Ahmetov I, *et al.* Genome-Wide Association Studies identify 15 genetic markers associated with marmite taste preference.. 2017.
- 5 Wang Y, Marling SJ, Plum LA, *et al.* Salate derivatives found in sunscreens block experimental autoimmune encephalomyelitis in mice. *Proc Natl Acad Sci U S A* 2017;114:8528–31.