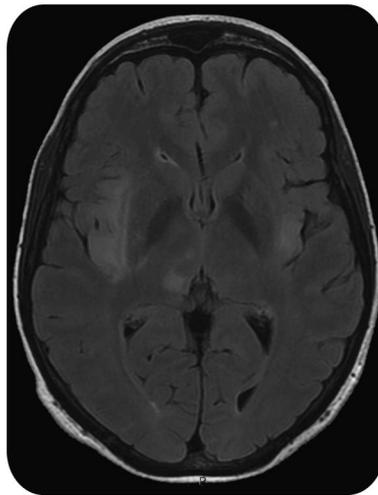


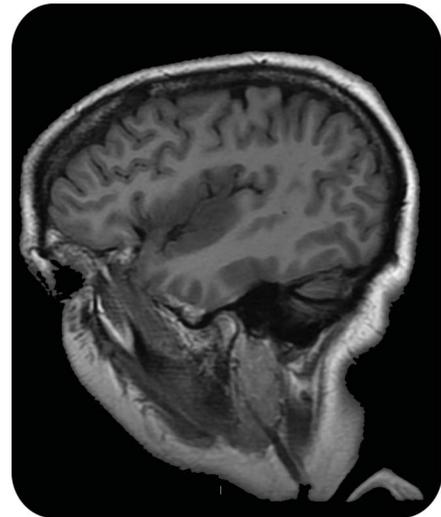
# A question of taste

**Figure 1** Axial T2 fluid-attenuated inversion recovery images showing high signal change in the insular lobes bilaterally



There is thalamic involvement also in the region of the left ventroposteromedial nucleus.

**Figure 2** Sagittal T1-weighted images demonstrating involvement of the overlying frontoparietal and temporal opercular regions



A 38-year-old woman presented with bilateral lower facial weakness and reduced taste, but preserved involuntary facial movements and smell.

Brain MRI showed high signal in the ventroposteromedial (VPM) nucleus of the thalamus (figure 1) and opercular cortex (figure 2). CSF showed paired oligoclonal bands; NMDA receptor antibodies were identified in serum. Viral CSF PCR and chest, abdomen, and pelvis CT were unremarkable. She was treated with steroids and recovered, though taste remained impaired.

Opercular syndrome manifests as weakness of the pharynx, jaw, and face, with preserved involuntary function. Causes include stroke, encephalitis, and degenerative disease<sup>1</sup>; autoimmunity is novel. The opercular cortex is involved in taste; VPM involvement may contribute, as it receives input from the nucleus of the solitary tract.<sup>2</sup>

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*Author contributions:* Sheena Murdoch: wrote the article and liaised with the other authors. George Gorrie: the patient's neurology consultant, proofread and suggested amendments to the article. Dana Small: Prof. Small has a special interest in taste perception. She suggested journal articles to read, provided expert advice in this particular case, and proofread the article. Joti Bhattacharya: reviewed the MRIs, chose the most appropriate ones, and wrote the descriptions for the figures.

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