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 disease¹; 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.²

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