A tasteless lesion

J.A. Feldman, MD; S.L. Galetta, MD; R.R. Miselis, VMD, PhD;
A.C. Rosenquist, PhD; and B.M. Ances, MD, PhD

A 45-year-old restaurant owner noted loss of taste over his entire left tongue during a two-week time period. Neurologic exam was otherwise normal including facial strength. Brain MRI revealed an enhancing lesion of the left dorsal pons (figure, A and B). The patient subsequently developed coordination difficulties and double vision. Repeat MRI confirmed a left superior cerebellar and a new frontal white matter lesion consistent with multiple sclerosis.

The anatomy of the secondary

projection fibers conveying the sensation of taste in humans remains poorly understood.¹ Recent mapping studies in monkeys suggest that the second order neuron projections from the nucleus of the solitary tract pass through the dorso-lateral pons before ascending as the central tegmental tract.² The lesion in our patient is just above the nucleus of the solitary tract and lies in the location of the second order neurons that project to the thalamus for taste.

We conclude that the ascending taste fibers from the nucleus solitarius travel within the dorso-lateral pons just medial to the superior cerebellar peduncle. A lesion in this location may produce this isolated deficit.

References

1. Combarros O, Sanchez-Juan P, Berciano J, et al. Hemiageusia from an ipsilateral MS plaque at the midpontine tegmentum. *J Neurol Neurosurg Psychiatry* 2000;68:796.
2. Paxinos G, ed. *Human nervous system*, 1st ed. San Diego: Academic Press Inc.; 1990: 852.

Figure. (A) Axial fluid level attenuation recovery MRI above the level of the nucleus of the solitary tract and (B) T1 postcontrast coronal at the ponto-mesencephalon. In both images, arrow shows demyelinating lesion.

From the Departments of Neurology (J.A.F., S.L.G.), Veterinary Medicine (R.R.M.), and Neuroscience (A.C.R.), University of Pennsylvania, Philadelphia; and the Departments of Neuroscience and Radiology (B.M.A.), University of California San Diego.

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Address correspondence and reprint requests to Dr. Jessica A. Feldman, Department of Neurology, 3 West Gates, Hospital of the University of Pennsylvania, 3400 Spruce Street, Philadelphia, PA; e-mail: jfeldma2000@hotmail.com

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