Anosmia as the initial presentation of neurosarcoidosis

Lakshman Arcot Jayagopal, MD, and Gloria von Geldern, MD

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Correspondence
Dr. von Geldern
vgeldern@uw.edu

A 35-year-old man presented with progressive anosmia and no other complaints or findings. MRI brain showed extensive bifrontal edema and enhancement (figure, A–C). In retrospect, 7 years prior he had a neck mass with granulomata on biopsy, but had never received treatment for sarcoidosis. Clinical symptoms and MRI abnormalities improved (figure, D and E) with oral prednisone and methotrexate and he was diagnosed with probable neurosarcoidosis. Neurosarcoidosis is a rare etiology of anosmia but needs to be considered as a differential consideration.1 Anosmia in sarcoidosis is caused by an obstructed nose or neurosarcoidosis of the olfactory epithelium, bulb, or tract.2

From the Department of Neurology, University of Washington, Seattle.

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Axial fluid-attenuated inversion recovery MRI (A, B) with extensive vasogenic edema in the inferior anterior medial frontal lobes and axial T1-weighted contrast images (C) show bilateral fronto pial and parenchymal enhancement. Seven months after treatment (D, E) shows resolution of the vasogenic edema and enhancement, respectively.

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Author contributions
L. Arcot Jayagopal: drafting/revising the manuscript, accepts responsibility for conduct of research and final approval. G. von Geldern: drafting/revising the manuscript, data acquisition, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval.

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References
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