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Teaching Neuro*Images*: Snowball-like lesions with sudden hearing loss

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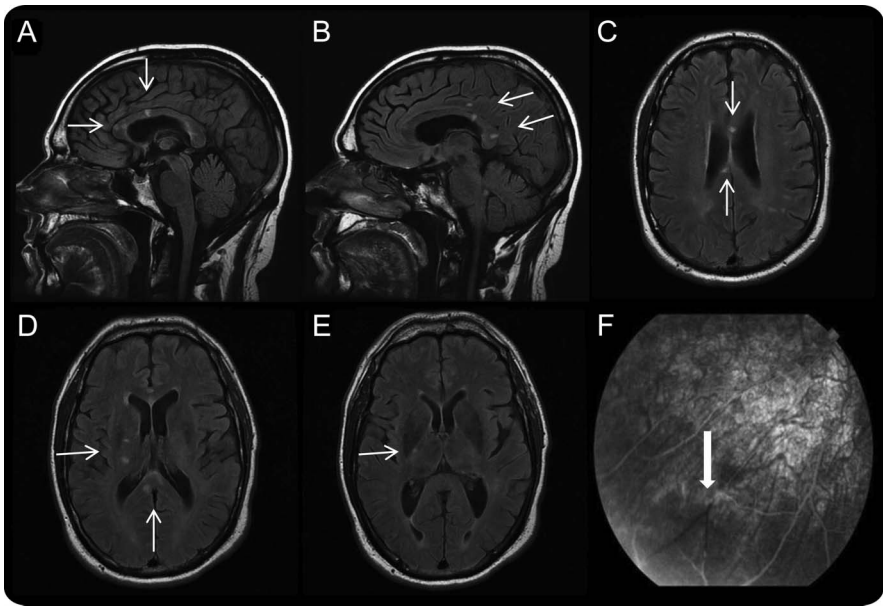
Figure Brain MRI T2/fluid-attenuated inversion recovery sequence and fluorescein angiography



Snowball-like lesions appreciated with sagittal (A, B) and axial (C) views are typically round, less than 10 mm, and classically located on the center of the corpus callosum.[2] Periventricular and subcortical lesions on remaining axial images are often seen with the syndrome (D, E). Branch retinal arterial occlusion is revealed by fluorescein angiography (F).

A 53-year-old man presented with abrupt hearing loss, followed by a 4-week course of recurrent vertigo, headaches, and ataxia. Brain MRI revealed multiple punctate ischemic foci on corpus callosum (figure). Cerebral angiogram and echocardiogram were unremarkable. Susac syndrome was diagnosed following findings of branch retinal artery occlusion from fluorescein angiography (figure).

Distinguishing MRI findings consist of snowball-like lesions located in the center of the corpus callosum, indicative of tiny precapillary arteriole occlusion.[1] Small arteriole involvement explains why arteriography is normal in the majority of cases.[2] This case underlies the importance of performing fluorescein angiography when encountering unexplained hearing loss and snowball-like lesions.

AUTHOR CONTRIBUTIONS

Dr. Oliveira: patient care, examination of the patient, drafting and revising the manuscript. Janina Mayeux: intellectual contributions and manuscript revision.

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DISCLOSURE

The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

REFERENCES

1. Bitra RK, Eggenberger E. Review of Susac syndrome. Curr Opin Ophthalmol 2011;22:472–476.
2. Susac JO, Murtagh FR, Egan RA, et al. MRI findings in Susac's syndrome. Neurology 2003;61:1783–1787.

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