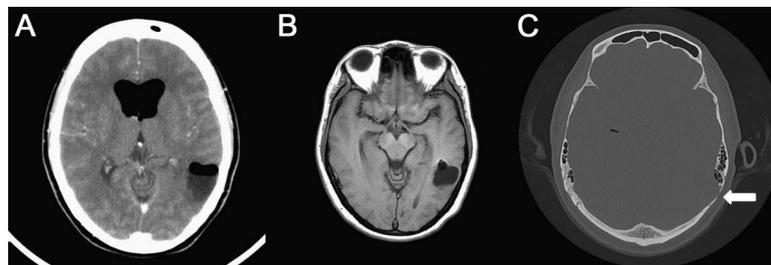


# Teaching NeuroImages: Spontaneous tension pneumo-hydrocephalus may be related to otitis media and temporal bony defect

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**Figure** Brain CT and MRI



(A) Head CT: air retention in bilateral ventricles and a focal low-density lesion with air-fluid level in the left side posterior temporal region. (B) Brain MRI: the cavitory lesion with marginal enhancement. (C) Bone windows of head CT: a small bone defect (arrow) at the left posterior temporal bone.

A 39-year-old woman with recurrent left otitis media presented with the sensation of fluid flowing in the head, headache, mild dyslexia, and disequilibrium for 2 weeks. She reported no head trauma and had a normal neurologic examination. Head CT (figure, A) showed intraventricular pneumocephalus and a focal low-density lesion with air-fluid level in the left posterior temporal region. Brain MRI showed minimal enhancement and no restriction of diffusion, and thus did not suggest an abscess (figure, B). CT of petrous pyramids demonstrated a small bone defect at the left posterior temporal bone, which was considered a possible point of entry for air (figure, C).<sup>1</sup> CSF culture was negative. Lumbar puncture to release intracranial pressure and antibiotic therapy resulted in full recovery without surgical intervention.

## AUTHOR CONTRIBUTIONS

Dr. Yu: drafting/revising the manuscript, study concept and design, acquisition of data. Dr. Peng: drafting the manuscript, interpretation of data. Dr. Cheng: revising the manuscript, analysis of data. Dr. How: drafting/revising the manuscript, study supervision.

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## DISCLOSURE

The authors report no disclosures relevant to the manuscript. Go to [Neurology.org](http://Neurology.org) for full disclosures.

## REFERENCE

1. Abbati SG, Torino RR. Spontaneous intraparenchymal otogenic pneumocephalus: a case report and review of literature. *Surg Neurol Int* 2012;3:32.

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