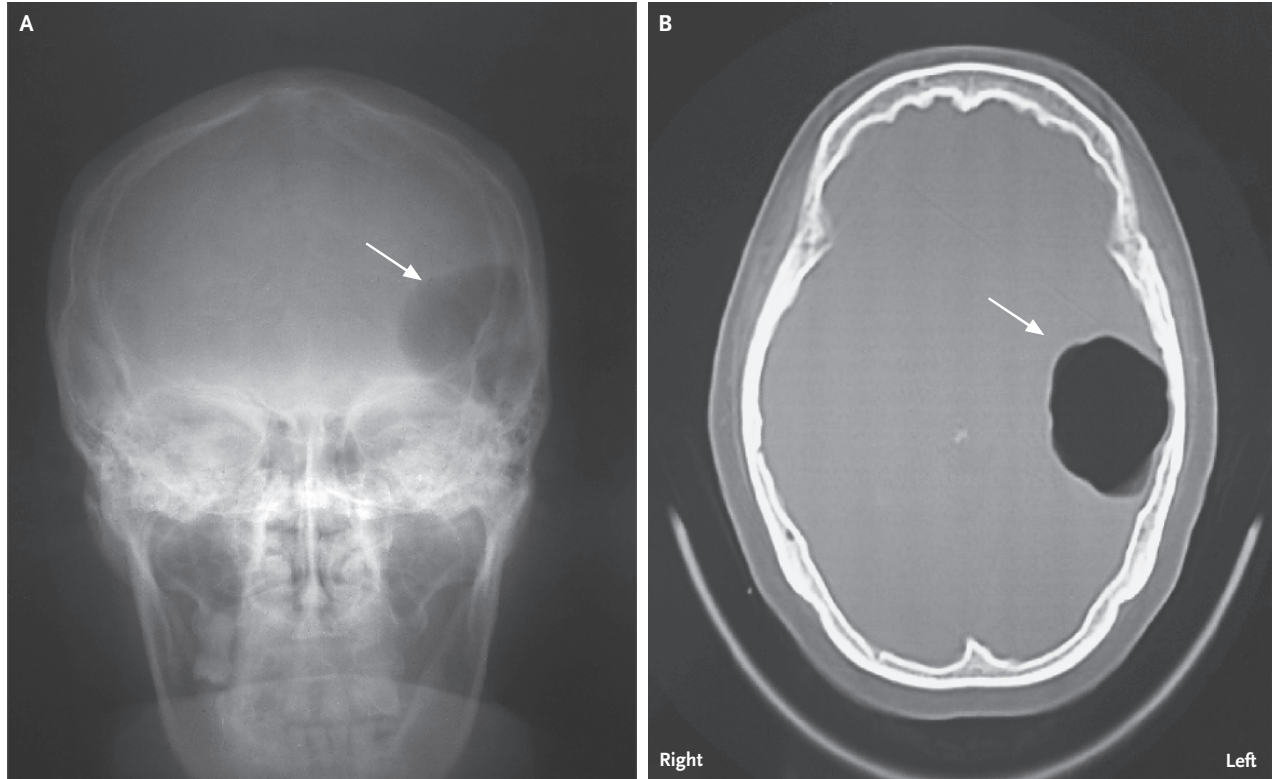


IMAGES IN CLINICAL MEDICINE

Spontaneous Otogenic Pneumocephalus



A HEALTHY 54-YEAR-OLD WOMAN PRESENTED WITH PROGRESSIVE ABNORMAL acoustic sensations, aphasia, and visual-field disturbances. She reported no head trauma or recent infection, such as otitis media. An initial cranial radiograph revealed air in the left temporal region without evidence of a fracture (Panel A, arrow). A computed tomographic scan of the head showed a large amount of air in the left temporal lobe; the involved area was approximately 4 cm by 3 cm by 5 cm (Panel B, arrow). This abnormality led to significant compression of the left lateral ventricle and the adjacent sulci and gyri; there was a midline shift, with signs of uncal herniation and slight brain-stem rotation. A left temporal craniotomy was performed, and a defect in the anterolateral surface of the mastoid was found and repaired. No specific underlying pathologic lesion — such as a tumor or infection — was identified. Pneumocephalus can occur after neurosurgical procedures, head and facial trauma, or ear infection and can even occur spontaneously, as in this patient. Although small amounts of air are usually reabsorbed without complications, in patients with increasing air entrapment, significant clinical sequelae may occur, as seen in this case. After surgical decompression, this patient's symptoms resolved immediately. Her postoperative course was uneventful, and she remains asymptomatic at 1 year.

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