

Images of the month 2: Extensive pneumocephalus after subdural haematoma

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Case presentation

An 80-year-old man presented with complaints of recurrent frontal headaches. Computed tomography (CT) of the brain showed a heterogeneous bilateral haematoma from the frontal to the occipital region (Fig 1a). Bilateral parietal craniotomy was performed. One day later, an extensive frontal pneumocephalus appeared, with compression of the bilateral cerebral parenchyma (Fig 1b). The patient remained asymptomatic, with no cognitive alterations or focal neurological deficits. Subsequent CT showed a gradual reduction of the pneumocephalus spontaneously until complete resolution, about 2 months later (Fig 1c).

Discussion

Pneumocephalus can happen after neurosurgeries like this, occurring after brain compression caused by chronic bleeding, associated with common cerebral atrophy at this age. After drainage of the haematoma, there was no cerebral expansion and the subdural space was filled by air, which occupied the space left by the blood. Characteristic radiology imaging is the 'Mount Fuji sign', a silhouette similar to the Japanese volcano of the same name.^{1,2} ■

References

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- 2 Michel SJ. The Mount Fuji sign. *Radiology* 2000;232:449–50.

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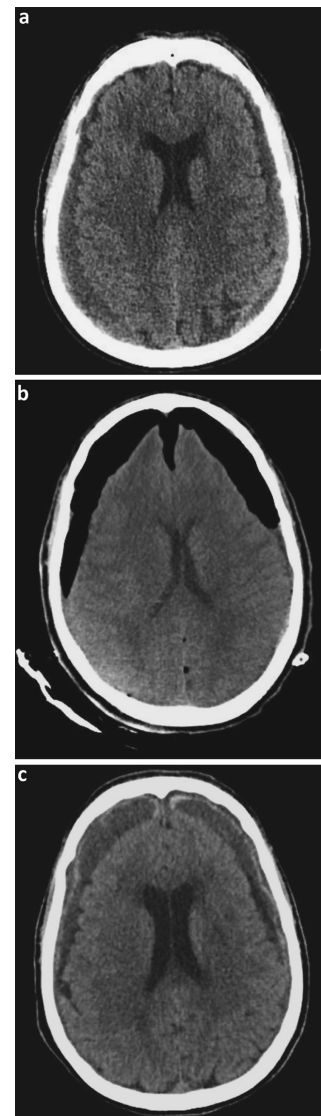


Fig 1. Computed tomography of the brain. a) Heterogeneous subdural haematoma, extending from frontal to occipital region bilaterally. b) Massive accumulation of air in the subdural space with compressive effects on both frontal lobes, the 'Mount Fuji sign'. c) Follow-up scan showing resolution of pneumocephalus.