

[PICTURES IN CLINICAL MEDICINE]

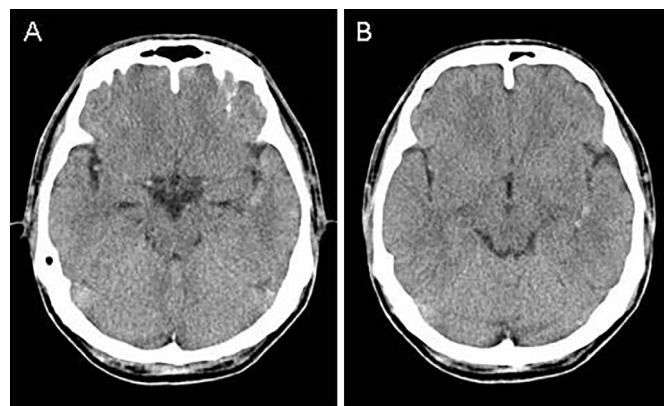
Enlargement of the Veins in a Sylvian Fissure Mimicking a Subarachnoid Hemorrhage

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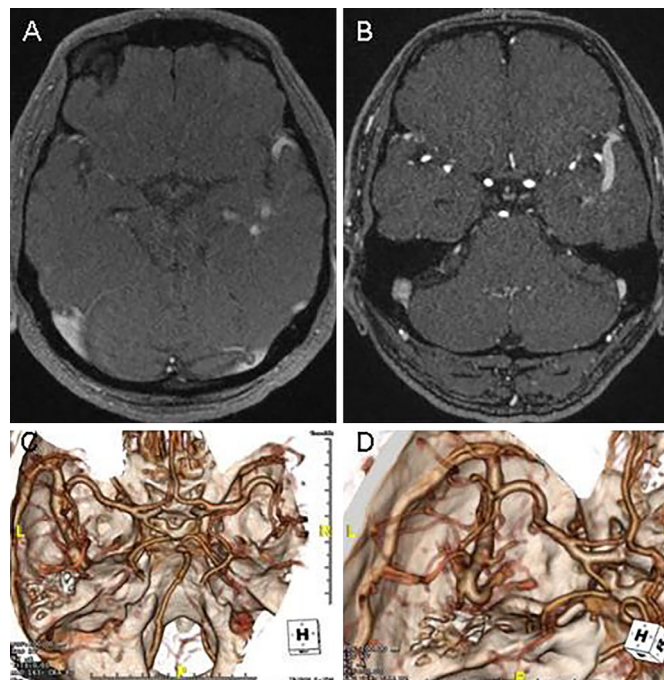
Key words: headache, subarachnoid hemorrhage, Sylvian fissure, superficial middle cerebral vein, deep middle cerebral vein, neuroimaging

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Picture 1.

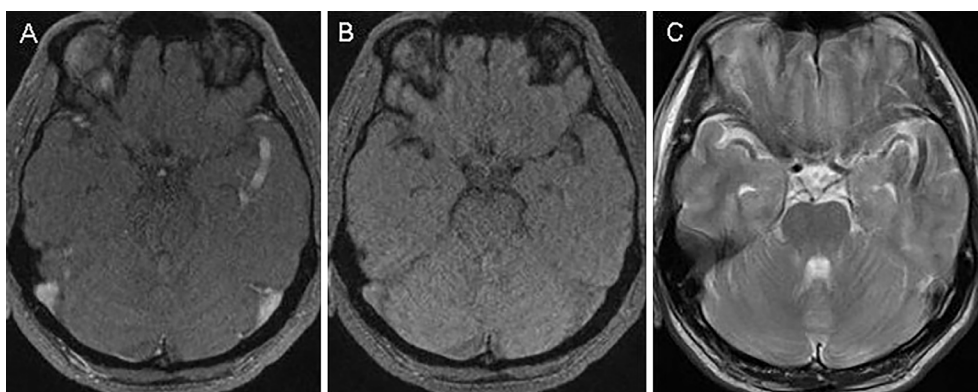


Picture 2.

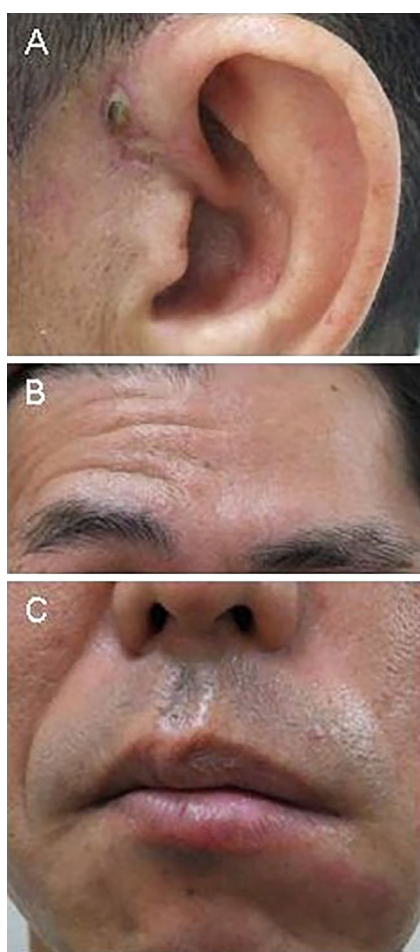
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Picture 3.



Picture 4.

A 45-year-old man visited our hospital following the experience of his first uncontrollable headache - which was not a migraine- or tension-type headache - which occurred despite treatment with non-steroidal anti-inflammatory drugs. A physical examination revealed no neurological abnormalities; however, non-enhanced computed tomography revealed a high-density area in the left Sylvian fissure (Picture 1). Advanced neuroimaging revealed a subarachnoid hemorrhage (SAH) - the findings of which were identical to

the enlargement of the veins in the fissure (Picture 2). Signal hypointensity of the corresponding region was noted on both T1- and T2-weighted magnetic resonance imaging - this was likely due to calcification and/or multiple thrombosis of the vessel wall due to the stagnation of blood flow concomitant with local inflammation and a hypercoagulable state (Picture 3). A diagnosis of Ramsay Hunt syndrome was subsequently made based on the development of left peripheral facial palsy, accompanied by ipsilateral herpetic vesicles surrounding the ear and mouth (Picture 4). The veins in the Sylvian fissure have two drainage pathways: 1) the superficial middle cerebral vein; and 2) the deep middle cerebral vein axes. The veins display a large degree of variation due to the prenatal development of anastomoses between the cavernous, sphenoparietal and superior petrosal sinuses (1, 2). Thus, the enlargement of the veins in the Sylvian fissure should be considered in the differential diagnosis of SAH using neuroimaging.

The author states that he has no Conflict of Interest (COI).

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References

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