Intracranial isolated varix

Intracranial isolated varix is a very rare entity.

The differentiation of venous varices versus angiomas has been debated in the literature. They have similar wall characteristics (intima and adventitia with no media). Venous varices are a focal dilatation of a single vein and, therefore, contain no neural tissue [1].

Imaging of varices has demonstrated single, enhancing saccular lesions on CT, with MR showing saccular lesions with signal flow void. Angiograms have shown focal dilation of an individual vein in each case [2] [3].

Although it is usually asymptomatic, there are reports on symptomatic cases with hemorrhage or mass effect that mostly relate to arteriovenous fistulas or arteriovenous malformations.

A 59-year-old female patient with noncontributory medical history presented with headache and insomnia for the last 2 months. Upon admission, her neurological examination was unremarkable. Magnetic resonance imaging revealed a well-demarcated extra medullary mass, 11 × 11 mm in size, within the subdural space at the right frontal lobe. The lesion was initially interpreted as a convexity meningioma. After conducting a craniotomy on the patient, an extra-axial varix was exposed and resected subsequently. The patient's headache was resolved soon after surgery and charged without neurologic sequelae.Extra-axial isolated cerebral varix is mimicking convexity meningioma on MR images and should be considered as a differential diagnosis. The focal erosion in the inner table of the skull could be an important character of extra-axial isolated cerebral varix. An extremely round shape and smooth contour of the lesion was another important character. Isolated cerebral varix is rare vascular lesion that is treated surgically in the case of rupture or compression of adjacent structures. The information obtained with noninvasive imaging techniques should include CTA to make a clinical decision [4].

Inoue et al, present an extremely rare case of trigeminal neuralgia caused by an isolated varix. A 55-year-old woman had been experiencing right trigeminal neuralgia for 3 years. Computed tomography and magnetic resonance imaging revealed an enhanced mass lesion on the root entry zone of the right trigeminal nerve. Angiograms confirmed the mass was a varix arising on the vein connecting the basal vein of Rosenthal and the superior petrosal vein. Preoperative three-dimensional (3D) imaging clearly depicted the anatomical relation of the varix, adjacent vessels, and trigeminal nerve, which helped plan operative procedures. The varix with its parent vein was successfully transposed from the nerve without sacrificing any veins. Her pain disappeared immediately after the surgery and did not recur during a 30-month follow-up period. The 3D image contributed to making an accurate and safer operative plan especially for this rare case [5].

1)
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