

상시상정맥동내의 거대 거미막과립 1예

대구파티마병원 신경과¹, 계명대학교 의과대학 신경과학교실²

박상원¹ · 손성일²

A Case of Giant Arachnoid Granulation within Superior Sagittal Sinus

Sang-Won Park¹ and Sung-II Sohn²

¹Department of Neurology, Daegu Fatima Hospital; ²Department of Neurology, Dongsan Medical Center, Keimyung University School of Medicine, Daegu, Korea

A 67-year-old woman presented with episodic headaches for 6 months. She had experienced these symptoms 4 times a month, typically beginning at the end of a day. The pain was described as similar to wearing a tight band around her head. The headaches were bothersome, but not disabling, and she denied any nausea or vomiting. Neurological examinations were normal. Because she had a new-onset headache, brain magnetic resonance imaging (MRI) was performed to evaluate cerebral diseases. T2-weighted brain MRI showed heterogeneous hyperintense round mass within the superior sagittal sinus (Figure 1A). Axial T1-weighted enhanced MRI showed focal central enhancement in the sinus (Figure 1C). The non-contrast MR venogram revealed an oval shaped filling defect at the posterior third of the superior sagittal sinus (Figure 1D). The brain

parenchyma is of normal signal intensity with no focal lesions, mass effect or pathologic diffusion restriction. These findings suggested a giant arachnoid granulation in the superior sagittal sinus. Her symptoms seemed to be compatible with tension-type headache. The headache was successively managed with acetaminophen 650 mg.

Arachnoid villi are microscopic growths of arachnoid membrane into the dural sinuses, whereas arachnoid granulations are visible to the naked eye and represent distended villi. We refer to arachnoid granulation as “giant” when it is of sufficient size to fill the lumen of a venous sinus and cause local dilatation of filling defect.^{1,2} Arachnoid granulations are never hyperdense on CT whereas venous sinus thrombosis has homogenous hyperdensity on unenhanced CT. The typical findings of giant arachnoid

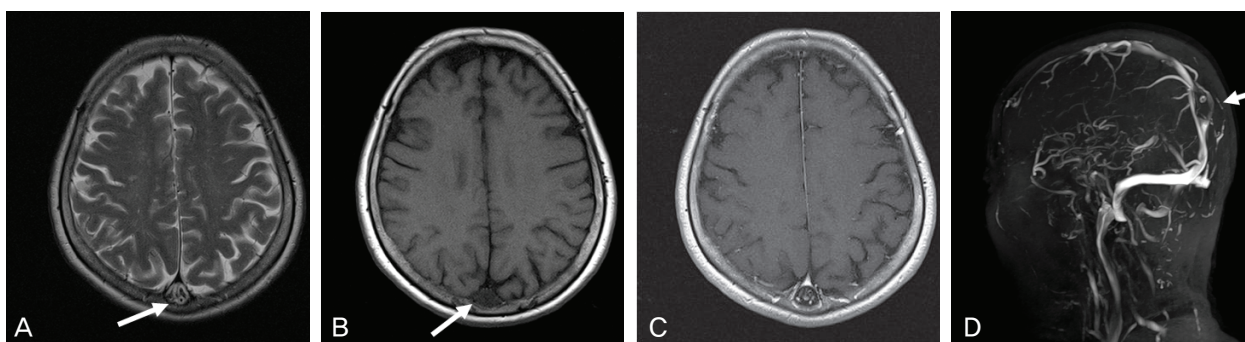


FIGURE 1. (A) T2-weighted brain MRI showed an inhomogeneously hyperintense mass in the region of the superior sagittal sinus (arrow). (B) T1-weighted MRI showed a hypointense mass. (C) Axial T1-weighted enhanced MRI showed focal enhancement centrally. (D) The MR venogram revealed an oval shape filling defect within the posterior third of the superior sagittal sinus (arrowhead).

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Address for correspondence: Sung-II Sohn, MD

Department of Neurology, Keimyung University School of Medicine, 56 Dalseong-ro, Jung-gu, Daegu 700-712, Korea

Tel: +82-53-250-7075, Fax: +82-53-250-7840

E-mail: docsohn@dsmc.or.kr

granulations are focal non-enhancing granules with central focal enhancement and surrounding enhancing flowing blood on MR venography.³ Arachnoid granulations within venous sinus sometimes make imaging interpretation difficult, particularly in patients with headache complaints in whom venous sinus thrombosis is a matter of concern. Although largely incidental, giant arachnoid granulations can rarely cause symptoms and surgical intervention is not thought to be necessary.

Conflicts of Interest

The authors have no financial conflicts of interest.

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