Redo Aortic Surgery in a Patient with a Large Arachnoid Cyst and Myelodysplasia

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Abstract

A 70-year-old man was referred for redo root and ascending aortic surgery. Preoperative investigations depicted a large arachnoid cyst occupying the left frontotemporal region and myelodysplasia with persistent thrombocytopenia. We describe successful operative management of this patient in the context of such rare intracranial pathology.

Keywords

- aortic surgery
- arachnoid cyst
- reoperative surgery

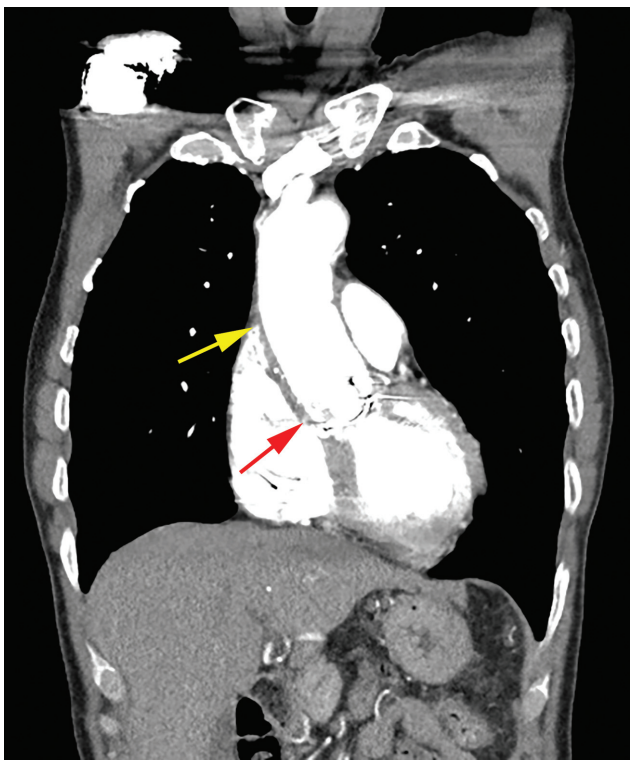

Fig. 1 Chest computed tomography coronal view showing dilated aortic root (4.8 cm, red arrow) and ascending aorta (4.5 cm, yellow arrow).

We report on a 70-year-old man referred for redo surgery having originally undergone isolated bioprosthetic aortic valve replacement a decade prior for regurgitant bicuspid aortic valve disease. Investigations demonstrated severe eccentric aortic regurgitation secondary to structural valve deterioration, left ventricular dilatation with moderately impaired systolic function, dilated root, and ascending aorta at 4.8 and 4.5 cm, respectively (►**Fig. 1**).

Comorbidities included myelodysplastic syndrome accompanied by a monoclonal gammopathy of undetermined significance with persistent thrombocytopenia. Cranial computed tomography scan depicted a large arachnoid cyst occupying the left frontotemporal region (►**Fig. 2**).

Reported prevalence estimates of arachnoid cysts are 0.3 to 1.7%.[1] Most feared complications of arachnoid cysts include intracystic or subdural hemorrhage associated with trauma, albeit spontaneous cases have been reported.[2]

Urgent neurosurgical consult was requested, in order to quantify the risks of bleeding and adverse neurological outcomes in the advent of redo aortic surgery and thrombocytopenia. In view of the chronic appearances of the arachnoid cyst in a neurologically asymptomatic patient, we were reassured to proceed with surgery. He underwent redo pericardial composite root and ascending aortic

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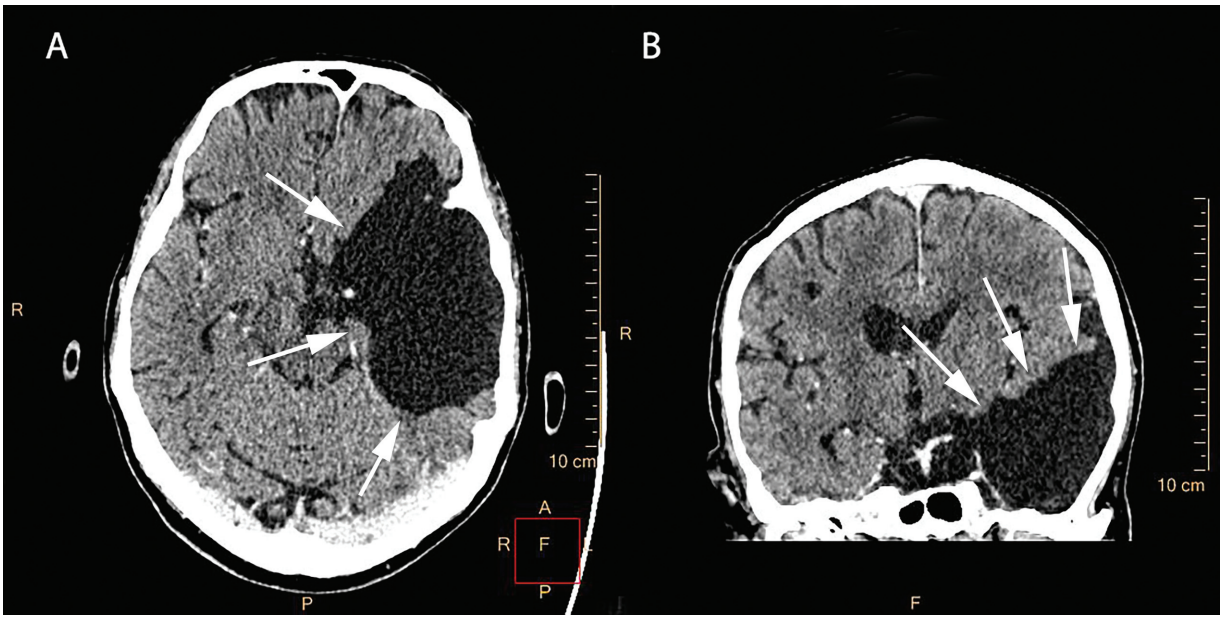

Fig. 2 Cranial computed tomography axial (**A**) and coronal (**B**) views showing arachnoid cyst (arrows) occupying left frontotemporal region.

replacement under moderate hypothermic circulatory arrest. He made an uneventful recovery and remains well 24 months postoperatively.

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Conflict of Interest
The authors declare no conflict of interest related to this article.

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None.

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