Aneurysms in medial posterior choroidal artery are exceptionally rare and only very few cases have been reported.\textsuperscript{1,2} We describe a giant aneurysm in this artery treated with endovascular embolization.

**CASE**

A 16-year-old male, otherwise healthy, presented to the emergency department with vomiting for one day and severe headache that had started gradually over one week. In the emergency department, he lost consciousness and his Glasgow Coma Score (GCS) dropped from 14/15 to 12/15. CT scan showed two adjacent mass lesions. The small one was 2.8 centimeters in diameter and located in the area of the third ventricle compressing interventricular foramen (of Monro) causing obstructive hydrocephalus. The large one was more posterior with diameter of 6 centimeters. Both masses were inhomogenously dense with calcifications in the walls. (Figure 1).

Four-vessel digital subtraction angiography (DSA) revealed an aneurysm in the left medial posterior choroidal artery that corresponded to the small mass described in the CT. Its blood supply was from the...
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posterior circulation and generously from the anterior circulation as a result of an enlarged left posterior communicating artery (Figures 2A, 2B). The venous drainage was through anomalous veins into the great cerebral vein of Galen. The posterior large mass was thrombosed.

The patient was admitted to the ICU and bilateral ventriculoperitoneal shunts were placed, after which gradual improvement was observed. During the ICU period he had multiple episodes of generalized seizures which were controlled by antiepileptic medications. He was transferred to the ward a few days later with GCS of 14/15 and in the night before embolization, he had status epilepticus which could not be controlled except by general anesthesia.

Endovascular embolization was carried out under general anesthesia and with systemic heparin administration. The left common carotid artery was accessed following femoral puncture. Through the left posterior communicating artery, the left medial posterior choroidal artery was superselectively catheterized with microcatheter. Ten Guglielmi detachable coils (GDCs) were used to embolize the aneurysm and the distal aspect of its parent artery. Postembolization DSA confirmed complete embolization of the aneurysm with no residual filling (Figures 3, 4).
The postembolization course was uneventful and the patient was discharged after a rehabilitation period in a good neurological condition. Six-month follow up DSA confirmed continued complete occlusion of the aneurysm. The patient was almost intact neurologically at the 9-month clinic follow up.

DISCUSSION
The few reported cases of aneurysms in the medial posterior choroidal artery cases were treated surgically through different approaches. Vascular malformation of the medial posterior choroidal artery was described first by Tahmouresie and Quest in 1979 and was treated surgically. Ezura et al reported a case of arteriovenous malformation (AVM) fed mainly by the left medial posterior choroidal artery and treated successfully by chemical embolization with conjugated estrogen followed by conventional radiotherapy.

In our case we report a giant (28 mm) unruptured aneurysm in the medial posterior choroidal artery that presented with mass-related symptoms successfully embolized along with its parent artery using GDCs. The associated AVM is in the form of anomalous feeding arteries and draining veins with a giant (60 mm) thrombosed vascular mass communicating with the aneurysm. The medial posterior choroidal artery could be approached through the posterior circulation. However, in our case, the approach was easier through the anterior circulation due to considerable enlargement of the posterior communicating artery. Although the initial complete occlusion of giant aneurysms often cannot be accomplished it was achieved in our patient. The combination of packing of the aneurysm with coils and occlusion of parent vessel is the most likely reason behind this successful result.

Endovascular embolization of unruptured intracranial aneurysms carries very low morbidity and mortality rates. Therefore, endovascular embolization of unruptured giant intracranial aneurysms can be considered as a successful therapeutic option.

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