

**Interesting Image / İlginç Görüntü****Extracranial internal carotid artery aneurysm coexisting with multiple intracranial arteriovenous malformations***Multipl intrakraniyal arteriyovenöz malformasyonlar ile birlikte gösteren ekstrakraniyal internal karotis arter anevrizması***Kadir Kaan Özsin**, **Umut Serhat Sanrı**, **Mesut Engin**

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A 54-year-old female patient was admitted to our outpatient clinic with a pulsatile mass and pain in the right side of her neck. Carotid Doppler ultrasonography revealed an aneurysm of the right internal carotid artery (ICA). Carotid artery angiography showed a right ICA aneurysm, measuring 3×2 cm (Figure 1). Before surgery, multidetector computed tomography (MDCT) was performed to demonstrate the aneurysmal arterial segment and its connections with normal arterial structures. Multidetector computed tomography demonstrated multiple fusiform aneurysmal segments of both intracranial and extracranial carotid arteries, and aneurysms associated with arteriovenous malformations (AVMs) within the zone of circle of Willis (Figure 2). The patient was transferred to

another hospital for further evaluation of definitive diagnosis and treatment.

Extracranial ICA aneurysms are rare and have an incidence of about 0.8% among all arterial aneurysms. Pathology may include; local infection, atherosclerotic disease, dissection, and previous carotid artery surgery.^[1] Catastrophic outcomes may be encountered, such as hemorrhage and stroke.^[2] Therefore, aneurysms should be treated. Treatment



Figure 1. Conventional carotid angiography images of (a) right and (b) left carotid arteries.

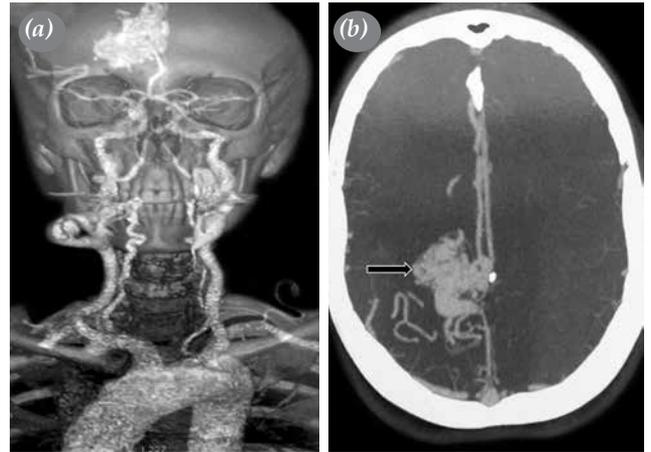


Figure 2. (a) Multidetector computed tomography images demonstrate extracranial and intracranial carotid artery aneurysms with intracranial arteriovenous malformations. (b) Cranial multidetector computed tomography image of intracranial arteriovenous malformations.

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options depend on etiology, location of the aneurysm, and symptoms. Extracranial ICA aneurysm surgery may be performed with ultrasonography and conventional angiography findings.^[3] Arteriovenous malformations are also associated with high risk of mortality. Arterial aneurysms and cerebral AVMs may coexist and are classified among themselves.^[4] We present this case to illustrate unexpected fatal complications that may occur after carotid artery aneurysm surgery. Surgery of carotid artery aneurysm must be carefully planned to avoid unexpected postoperative outcomes.

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