Cranial cavernous malformation

Cranial cavernous malformations (CCMs) constitute a heterogeneous group of lesions that tend to change dynamically over time with related periods of repeated exacerbation and alternating periods of remission.

Case series

The decision on their management is based on estimating the inherent risk of further morbidity and the risk/benefit related to the particular treatment mode. Incidentally detected CCMs or lesions in asymptomatic patients presenting without major hemorrhage are best followed up. Complete resection of a CCM is the only healing option and is indicated for symptomatic or hemorrhagic lesions. In the large published series 83-92 % of the patients improved or remained unchanged after surgery, with only 8-11 % showing significant deterioration. For most patients, quality of life is improved. Analysis of the risk/benefit ratio for radiosurgery shows that it should not be regarded as an alternative option: It confers limited protection against bleeding and is related to a certain morbidity risk. In the subgroup of patients with symptomatic or hemorrhagic CCMs in locations that preclude surgical resection with acceptable risks, we recommend follow-up. The senior author is following a group of more than 80 such patients, and the vast majority remain free of hemorrhage and symptoms [1].

Case reports

A rare case of cavernous angioma mimicking a meningioma in a 58-year-old man who presented with a headache and dizziness. There were no neurological deficits or other neurological symptoms or signs. An extra-axial mass lesion thought to be associated with diffusely well-enhanced falx in the postcontrast sections was noted in the posterior interhemispheric fissure near the posterior part of the corpus callosum splenium. Extra-axial cavernous angiomas (cavernomas) are extremely rare lesions. They most commonly occur in the parenchyma but have been occasionally reported to arise from the dura matter. Dural cavernous angiomas arise from dural sinuses, falx cerebri, tentorium cerebelli, cranial base dura, or internal auditory canal dura and convexity. Parenchymal cavernous angiomas classically have a ring of hemosiderin surrounding the lesions observed on magnetic resonance imaging, but dural cavernous angiomas do not display the same magnetic resonance imaging characteristics and occasionally exhibit a dural tail sign due to which they can often be misdiagnosed as meningiomas [2].

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Bertalanffy H, Gerganov VM. Microsurgical or radiosurgical management of intracranial cavernomas. Acta Neurochir Suppl. 2013;116:103-6. doi: 10.1007/978-3-7091-1376-9_16. PubMed PMID: 23417466.
2)
Uzunoglu I, Guvenc G, Kizmazoglu C, Aydin HE, Kaya I, Rezanko TA, Yuceer N. Cavernous Angioma Mimicking Meningioma. J Craniofac Surg. 2019 Feb 9. doi: 10.1097/SCS.0000000000005177. [Epub ahead of print] PubMed PMID: 30845079.