

Supratentorial Cavernous Malformations: Surgical Management And Outcome

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Introduction:

Cavernous malformations are common vascular malformations composed of thin-walled sinusoids with no intervening brain parenchyma.

Aim:

To evaluate the outcome of surgical resection of supratentorial cavernous malformations.

Material And Methods:

12 patients with supratentorial cavernous malformations operated upon in the period from June 2014 to December 2016 in XXX were retrospectively studied for surgical outcomes including extent of excision, improvement of symptoms and development of complications. Pre-operative CT and MRI were performed in all patients in addition to angiography when the diagnosis was doubtful. Patients were followed up clinically and radiologically for 1 year after surgery.

Results:

The study included 6 males and 6 females with an average age of 34.6 years. The lesion was frontal in 4, temporal in 4, parietal in 3 and occipital in 1 patient. Epilepsy was the most common presenting symptom occurring in 6 patients. Total resection was achieved in 11 (91.7%) patients. Total resection of the surrounding hemosiderin-stained brain was achieved in 9 (75%) patients. Improvement of pre-operative symptoms was achieved in 11 (91.7%) patients. Post-operative complications occurred in 2 (16.6%) patients in the form of superficial wound infection in 1 patient and transient hemiparesis in the 2nd. No mortality occurred in our series.

Conclusions:

Surgical excision of symptomatic supratentorial cavernous malformations provides good control of pre-operative symptoms and has a low rate of morbidity and mortality. The aim of surgery should always be total excision of the malformation and, whenever possible, the surrounding hemosiderin-stained brain as well.