Suprasellar arachnoid cyst outcome

To find out the long-term outcome of suprasellar arachnoid cysts, a retrospective review of the patients was performed. The neurological and endocrine symptoms were thoroughly reviewed.

Forty-five patients with suprasellar arachnoid cysts, with an average follow-up duration of 9.7 years, were enrolled in the study. A comprehensive review was performed of the results of follow-up regarding not only neurological symptoms but also endocrine status. The outcomes of 8 patients who did not undergo operations and were asymptomatic or had symptoms unrelated to the cyst were included in the series.

Surgery was most effective for the symptoms related to hydrocephalus (improvement in 32 of 32), but endocrine symptoms persisted after surgery (4 of 4) and required further medical management. More surprisingly, a fairly large number of patients (14 of 40; 1 was excluded because no pre- or postoperative endocrine evaluation was available) who had not shown endocrine symptoms at the time of the initial diagnosis and treatment later developed endocrine abnormalities such as precocious puberty and growth hormone deficiency. The patients with endocrine symptoms detected during the follow-up included those in both the operated (n = 12 of 32) and nonoperated (n = 2 of 8) groups who had been stable during follow-up since the initial diagnosis.

This study implies that patients with suprasellar arachnoid cysts can develop late endocrine problems during follow-up, even if other symptoms related to the cyst have been successfully treated. Hence, patients with these cysts need long-term follow-up for not only neurological symptoms but also endocrine abnormalities [1)]

Intellectual capability after treatment at outcome is not related to age at diagnosis, initial or final cyst size, presence or absence of hydrocephalus, or type of endoscopic treatment [2)].

1)
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2)
Crimmins DW, Pierre-Kahn A, Sainte-Rose C, Zerah M. Treatment of suprasellar cysts and patient outcome. J Neurosurg. 2006 Aug;105(2 Suppl):107-14. PubMed PMID: 16922071.