Commentary

Colloid cysts are most commonly located in the third ventricle and represent benign intracranial lesions that account for 0.5 to 2.0% of brain tumors[1] but 15-20% of all intraventricular lesions.[2] Although first described in the middle of the 19th century effective management was not available until almost 75 years later.[2] Patients typically, experience slowly progressive headaches due to obstructive hydrocephalus.[3] In some patients, however, acutely severe obstructive hydrocephalus can result in sudden death,[4] making early detection and treatment necessary.

The authors of the current article by Rajesh *et al*., report on their experience with a xanthogranulomatous variant of a colloid cyst of the third ventricle in a 30-year-old male patient.[5] The lesion was resected using a transcallosal interforniceal route using microsurgical technique. The patient required post-operative ventriculoperitoneal shunting.

There has been some interest in comparing different minimally invasive or endoscopic approaches to traditional microsurgical approaches to the third ventricle, see for instance Horn *et al*.,[6] Obviously comparison studies like this do not take local practice patterns and constraints into account, which may affect for instance the authors of the current paper.

Endoscopic approaches are in general slightly better tolerated, which is potentially reflected in a shorter length of stay.[6] The overall rate of complications is mostly comparable and other factors, e.g. the smaller proportion of residual tumor in the microsurgical groups (6% versus 47% in the endoscopic group[6]) may be beneficial in a practice setting where serial follow-up imaging studies are either financially prohibitively or place an undue burden on patients when large distances have to be traveled. Placement of a ventriculoperitoneal shunt was required in 19% of patients in the microsurgical cohort described by Horn *et al*.,[6] compared to 0% in the endoscopic group. As with most rare conditions, the treatment is usually best concentrated in fewer hands and the surgeon should utilize the approach that is the most familiar to enhance the chance of success.

Xanthogranulomatous colloid cysts of the third ventricle are rare and a few case reports have been described.[5,7] The radiological appearance can be variable and a diagnosis of this histopathological variant cannot be made with certainty preoperatively. The authors of the current paper do not give us any information and it only be speculated that possibly spillage of some of the cyst contents may have contributed to the need for a shunt post-operatively.

In a more extreme case Webb *et al*. describe a case of a xanthogranulomatous colloid cyst where the inflammatory nature of the cyst and its contents probably caused chemical meningitis and severe, life-threatening vasospasm affected all four major vessels, requiring aggressive management by endovascular injection of nimodipine and angioplasty.[8]

The xanthogranulomatous variant of third ventricular colloid cysts thus is a rare congenital midline intracranial tumor of benign histology. The treating physician must recognize that this lesion is managed mostly similar to a common colloid cyst, but in addition the risk of intraoperative spillage of cyst material can result in a significant chemical meningitis and secondary morbidity. Should the radiological or intraoperative appearance of the cyst material raise the possibility of a xanthogranulomatous variant the surgeon should employ extra care to remove all cyst material.

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