Letter: Colloid Cysts: Evolution of Surgical Approach Preference and Management of Recurrent Cysts

To the Editor:

We read with great interest the recent article by Heller and Heilman[1] concerning the microsurgical resection of colloid cyst via a transcranial vs endoscopic approach. The authors conclude that microsurgery has been shown to provide the highest success rate for cyst wall resection and lowest rate of recurrence. Hence, it should be proposed as first-line surgical option for patients undergoing treatment for primary and recurrent colloid cysts.[1]

The natural history of colloid cyst had been much debated. In a recent retrospective review,[2] a predictive score for developing obstructive hydrocephalus and/or further surgical management has been established, taking into account the age (>65), headache presence at diagnosis, axial diameter (>7 mm), fluid-attenuated inversion-recovery magnetic resonance imaging (MRI) hyperintensity, as well as a certain anatomical location (between lamina terminalis and the line traced by the mammillary bodies and tangential to massa intermedia).

Once the surgical decision is established, the management remains somewhat controversial between the endoscopic, interhemispheric transcallosal, and transcortical approach.[3] A recent systematic review[3] suggested significantly higher gross total resection rates and lower recurrence rates for the microsurgical approach. In this sense, the results presented by Heller and Heilman[1] are perfectly in line with both our experience and what has been reported in the literature.

Concerning the surgical route, several aspects warrant for further discussion and should be mentioned, in our opinion. One is related to the fact that postoperative seizures are more frequent in the transcortical approach, which is comprehensible. Second, venous stroke, as reported here by the authors, is more frequent in the interhemispheric transcallosal approach, mainly related to lesioning of the bridging veins. A third aspect is that memory impairment seems not to statistically differ between the endoscopic and microsurgery group, although there is an inconsistently reported testing.[3] Some of these aspects might also help in decision-making.

In favor of the endoscopic approach, some might argue that there is a learning curve,[4] and that in recently published series, the resection rates achieved is 80%, as compared with 60% in much older studies.

More recent data on large cohorts[5] "revealed few differences in surgical complications following colloid cyst excision *via* microsurgical and endoscopic approaches. Post-operative seizures and thirty-day readmissions were seen at higher frequency in patients who underwent microsurgical" resection.[5]

We congratulate the authors[1] for a very nice study. The choice between microsurgical approaches remains difficult in the absence of randomized control trials in this rare pathology. In consequence, the medical decision should be patient-tailored, taking into account the ventricular size, cyst location, and clinical presentation. We favor also, in our experience, the transcranial approach, most often using the interhemispheric transcallosal approach but utilizing the transcortical approach when more feasible. We appreciate the extent of resection intraoperatively. As other authors, we do not consider that the immediate postoperative MRI can reliably evaluate the state of resection and is not necessarily a predictor for recurrence.[6]

Disclosures

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