Transcortical–transforaminal microscopic approach for purely intraventricular craniopharyngioma

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Purely intraventricular craniopharyngiomas are rare and pose particular surgical challenges. The two main surgical approaches to these lesions based in the anterior third ventricle are the frontal transventricular approach (through a transcortical or transcallosal approach) and the trans–lamina terminalis approach. The authors note that the pituitary stalk in many of these cases is located in a normal position, which suggests that the third ventricular floor is intact. In such cases, the senior author chooses an approach to avoid disruption of the floor of the third ventricle. Specifically, a traditional frontotemporal approach is not used; we have found that in such cases, a frontal transventricular approach through the usually dilated foramen of Monro provides an optimal visualization of the tumor while minimizing the risks of injury to the hypothalamus and pituitary stalk. The endoscope can be very helpful in exploring blind angles, hidden from the microscopic view. Recognition of this rare location variant of craniopharyngioma is helpful in preoperative planning in an effort to reduce hypothalamic/pituitary axis damage. Two patients presenting with craniopharyngiomas that were entirely intraventricular are shown in the video. The patients underwent removal of their tumors without incurring new long-term endocrine deficits.

The video can be found here: http://youtu.be/VFlhm_lsrGY.

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