

Intraventricular craniopharyngioma

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Intraventricular [craniopharyngiomas](#) account for 0.5–11% of all craniopharyngiomas ^{1) 2)}

These tumors show an intact [third ventricle](#) floor, a [suprasellar cistern](#), a normal [pituitary stalk](#), and an absence of sellar abnormalities ³⁾.

Intraventricular craniopharyngiomas are difficult to remove.

Approaches

The two main surgical approaches for these lesions are the [translamina terminalis approach](#) and the transventricular approaches. The translamina terminalis approach using subfrontal, pterional, or basal [interhemispheric approaches](#) has been used to treat suprasellar or intraventricular craniopharyngiomas ^{4) 5) 6)}.

Although this approach is easy for accessing tumors in the inferior part of the third ventricle, it is difficult to remove large lesions ⁷⁾.

The [transventricular approach](#) through a transcortical or [transcallosal approach](#) allows access to the [third ventricle](#) with transforaminal, subchoroidal, or transfornician approaches. The usefulness of these approaches have been reported for intraventricular tumor removal ^{8) 9) 10) 11)} but there is a risk of injuries to the surrounding neuronal or vascular structures, such as the body of the [fornix](#).

Case reports

We combined an interhemispheric transcallosal approach with a flexible endoscope (videoscope) for successful tumor removal.

A 52-year-old male complained of general fatigue and memory disturbance. Magnetic resonance

imaging revealed a well-enhanced third ventricle mass with dilatation of lateral ventricles. During removal with the interhemispheric transcallosal approach, a videoscope that was inserted into the left lateral ventricle revealed the interface of the tumor and the ventricular wall. The tumor was pushed to the right using forceps and removed totally through the right foramen of Monro without any fornix injury.

This procedure is a safe option for removing third ventricular tumors especially in the case with hydrocephalus ¹²⁾.

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