

Lateral ventricular tumours: Rare 0.75% of all intracranial tumours (Dandy) 65% in patients younger than 40 years. Patients present with headaches, cognitive deficit, gait disturbance, seizures, paresis (rare 7%), and visual symptoms (depending on the location)

I. Primary: from ventricular structures

1. Meningioma (trigone)
2. Ependymoma, subependymoma
3. Choroid plexus tumours (papilloma, carcinoma)
4. Central neurocytoma
5. SEGCA
6. Epidermoids
7. Parasitic cysts (neurocysticercosis); manifests as intraventricular mass in 15-50%.
8. Cavernoma
9. Metastases

II. Secondary: from periventricular white matter (AA, GBM, oligodendroglioma, lymphoma)

The majority of ventricular tumours are benign.

Tumours in the frontal can be approached through:

1. Transcortical approach: precoronal, through medial frontal gyrus (5% of seizures, difficult if ventricles are of small size, risk of hemiplegia from retraction on the genu of CC).
2. Transcallosal :points to observe (supine position with head elevation, the incision and the craniotomy should cross the midline, preserve bridging veins if possible, don't confuse cingulate gyrus and callosomarginal arteries with CC and pericallosal arteries (CC more white and more firm), the anastomosing branches between both pericallosal arteries can be coagulated, the anterior 1/3 of CC can be incised).

Tumours in the body are best approached through Transcallosal approach, in the atrium through superior parietal lobe (lateral position), trigonal lesions extending into occipital cortex may be approached through the occipital pole. Posterior Transcallosal approach may result in alexia without agraphia.

Tumours of the temporal horn can be approached through:

1. Middle temporal gyrus: preserve vein of Labbie
2. Temporal polectomy: avoid in dominant hemisphere, use cortical mapping to localise speech areas (speech areas may extend anteriorly in some patients and the classical teaching that the anterior 4 cm can be excised is not always valid).