of the cranial nerve pairs, unilateral convergent strabismus of the left eye and diplopia due to paresis of the left sixth cranial nerve pair were detected. Ophthalmic fundus examination showed incipient papilledema. The rest of the neurological physical examination was negative. Complementary blood, biochemistry, chest radiograph and abdominal ultrasound studies were all normal. Considering the findings of the neurological physical examination, cranium tomography is decided, in which a tumor mass was observed in the left ventricular trigone projection with dilation of the ventricular temporal horn on the same side.

For better definition and differential diagnosis from the radiological point of view, we decided to perform a magnetic resonance study (MRI) study, which showed an isointense mass on both T1 and T2. It was well-defined, localized in the left lateral ventricle at the level of the trigone and temporal horn, causing dilation of the latter. The density was homogeneous and size, approximately 4 x 3 cm. Intravenous contrast administration showed intense contrast uptake by the tumor, which largely corresponds to a meningioma type tumor (Figure 1).

The treatment of this patient in our setting involves transcortical surgical resection by a conventional surgical technique. Therefore, left parieto-occipital transcortical approach is planned and performed to minimize handling of important functional areas. Macroscopically, complete removal of the tumor was achieved (Figure 2), which was classified as transitional meningioma from the histopathological standpoint (Figure 3).

Evolutionarily, there has been no recurrence of the lesion six months after surgery, with favorable clinical and radiologi-
Intraventricular meningioma in childhood

Giomas located here are believed to originate from arachnoid cells in the stroma of the choroid plexus (9). The slow growth of these lesions, due to their biological nature, as well as intraventricular location, favor late onset of clinical manifestations. These clinical signs are usually secondary to increased intracranial pressure; focal neurological deficits and seizures are also frequently reported in the literature (10). Headaches are often intermittent, diffuse and ipsilateral at onset; but once intracranial hypertension is established, these headaches become continuous and frequently associated with vomiting. Ocular symptoms are subjectively expressed as decreased visual acuity in 50% of cases and papilledema is detected in fundus examination in 2 out of 3 cases.

Language disorders occur in approximately 40% of patients with tumors affecting the dominant hemisphere. Nonspecific psychiatric disorders may also occur, such as: depression, disorientation and behavioral disorders.

Differential diagnosis of intraventricular meningiomas should mainly be done with other types of tumors such as choroid plexus papillomas, low-grade astrocytomas, ependymomas, oligodendrogliomas, metastasis and lymphoma, among others.

Today, surgical treatment of meningiomas of the trigone remains a challenge, even with the new neurosurgical technologies available (11), which aim towards complete tumor resection. There are different approaches using conventional surgical techniques, including the posterior transcallosal, posterior transparietooccipital and transtemporal through the middle temporal gyrus, the latter two being transcortical. Application of endoscopic techniques allows exeresis of intraventricular lesions with reduced morbidity; however, these techniques may be limited in the case of large lesions with firm consistency, as is the case of meningiomas (3,11) and depending on the scientific development of the institu-

Figure 1. Magnetic resonance images showing the left intraventricular tumor
tion where the surgery is performed. In our particular case, the transcortical parieto-occipital route was used, due to the location of the lesion in the dominant hemisphere, with the aim of reducing transoperative morbidity of functional sites, as the language area, achieving complete resection of the lesion that had histopathological classification corresponding to benign meningioma, WHO group I.

CONCLUSIONS
Meningioma type tumors are rare in childhood, but can be diagnosed, preferably in their intraventricular location. The conventional surgical approach is transcortical, an option to be considered for their total elimination and cure in places with poor technological resources, without major sequelae for the patient in relation to the magnitude of the procedure.

REFERENCES


