



INTRAVENTRICULAR MENINGIOMA- CASE REPORT OF RARE ENTITY

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ABSTRACT

Intraventricular meningiomas are rare 0.5 to 5%. They are mostly WHO grade 1 and show lower recurrence rate than extra-axial meningiomas. Tumor resection is generally curative.

KEYWORDS : intraventricular, meningioma, female, NF2

INTRODUCTION

Intraventricular meningioma is rare. It is usually WHO grade 1 tumor with predilection for lateral ventricles and female gender. Tumor resection is generally curative.

CASE STUDY

A 34-year-old female presented with occipital headache, confusion, vomiting episodes and altered consciousness since 2 months, which worsened since 15 days. Radioimaging showed 73 x 64 x 70 mm well defined, calcified mass in trigone causing compression of anterior portions of both lateral ventricles and third ventricle. Mild hydrocephalus seen. Both sylvian fissures and sulcal spaces were effaced suggestive of cerebral edema. (Figure 1)

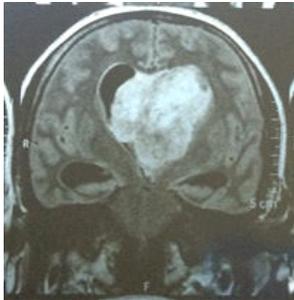


Figure 1: Computerized tomography shows homogenous contrast enhancement of midline bifrontal intraventricular mass.

The patient underwent craniotomy and gross total surgical excision of mass. Histopathology showed features of WHO grade 1 psammomatous meningioma (Figure 2).

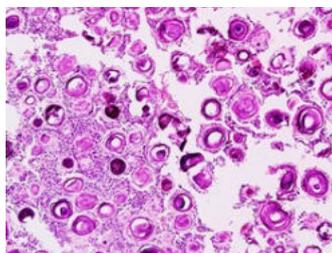


Figure 2: Photomicrograph shows meningothelial whorls with syncytial cells. There are multiple psammoma bodies (H&E stain, 10 x)

Intraventricular meningioma are rare 0.5 to 5%. They tend to be commoner in females and in trigone location. They tend to be densely calcified and WHO grade 1 (89.8%). They show lower recurrence rate than extra-axial meningiomas. Mortality rate (4%) is associated with post-surgical complications such as hematoma, infection and bronchopneumonia. 1,2

On radioimaging they are isodense on T2W with intense and homogenous contrast enhancement.

Distribution is as follows: lateral ventricle, 77.8%; third ventricle, 15.6%; and fourth ventricle, 6.6% Intraventricular meningiomas tend to arise from tela choroidea or mesenchyme of choroid plexus.

Tumor is fed by anterior and posterior choroidal arteries. Hence

preoperative embolization can prevent hematoma. In the series, NF2 mutation was the only recurring alteration with SMARCB1 mutation. None of the cases were hypermutated. NF2-mutant progressing or recurring IVMs could potentially be treated with targeted therapies soon.^{1,2,3}

CONCLUSIONS

Intraventricular meningiomas are rare. Although they do not pose diagnostic problems on histopathology, they remain a diagnostic dilemma for radiologists.

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