

## Short Report

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# Cystercotic fourth ventricle ependymitis

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### Abstract

Neurocysticercosis is endemic in many regions of the world. Extra parenchymal forms of neurocysticercosis are infrequent but may be associated with hydrocephalus. We report the case and show a typical MRI of fourth ventricle ependymitis caused by cysticercosis.

**Keywords:** Ependymitis; cysticercosis.

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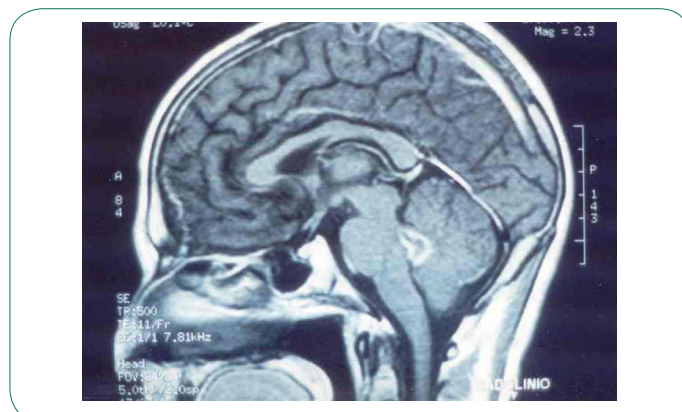
### Introduction

Neurocysticercosis is the infection of the CNS and the meninges by the larval stage of the *Taenia solium*. Neurocysticercosis is endemic in most Latin American countries where is the major cause of adult-onset epilepsy.

### Case report

A 16 year-old man had progressive headache, nausea, vomiting, horizontal diplopia and visual failure for two weeks. On examination bilateral horizontal nystagmus, papilledema, and multidirectional diplopia were found.

A CT scan showed obstructive hydrocephalus and contrast enhancement of fourth ventricle walls and a small right frontal calcified lesion. Western Blot for cysticercosis was positive in serum and in CSF. Ventriculoperitoneal shunt was performed with marked clinical improvement. Three weeks later an MRI showed aqueduct stenosis with partial collapse of fourth ventricle with enhanced walls because of cysticercosis ventriculitis [1] (Figure).



## Discussion

The clinical expression, management and prognosis of neurocysticercosis vary depending of the number, size, stage and location of lesions as well as the presence or absence of inflammatory response of the host [2].

Patients with intraparenchymal cerebral parasites may be asymptomatic or present with seizures. Patients with intraventricular cysts and/or basal subarachnoid cysticerci cause hydrocephalus and/or intracranial hypertension and are associated with a large burden of morbidity and significant mortality. Fourth ventricle ependymitis is a very rare complication of neurocysticercosis.

## Conclusions

Even if intraventricular cysts may be seen on CT as hypodense lesions that distort the ventricles they are by far better visualized on MRI as single or multiple cysts more frequent in the lateral ventricles or in the fourth ventricle.

MRI is the best accurate technique to assess the magnitude of hyperintense signals in ependymal layers.

## References

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