Conservative management of a mesencephalic tuberculoma

Case report

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A case of clinically unsuspected mesencephalic tuberculoma that was diagnosed at operation is presented. After intraoperative diagnosis, the surgical procedure was interrupted and specific treatment with tuberculostatic agents was started. The symptoms remitted totally in a few months. This conservative management is preferable to surgical removal when the diagnosis of brain-stem tuberculoma has been established.

KEY WORDS • brain-stem tumor • tuberculoma • mesencephalon

Surgical management of tumors of the mesencephalic region is difficult due to their location and their frequently infiltrative nature. We are reporting the clinical management of a patient with symptoms and signs suggesting a mesencephalic tumor. Surgical exploration showed the tumor to be a tuberculoma.

Case Report

This 31-year-old man was seen by us in May, 1980, with an 8-month history of paresthesia in the right leg that gradually spread to the right arm; in the last month it was accompanied by loss of power in the right leg. On neurological examination, he had right spastic hemiparesis with discrete central facial paresis and incoordination of the right hand movements.

Blood and urine analysis was normal. X-ray films of the chest and skull were also reported as normal. Computerized tomography (CT) demonstrated a hypodense lesion in the left side of the mesencephalon that showed enhancement after contrast administration. The lesion was exerting discrete mass effect upon the posterior part of the third ventricle, causing moderate hydrocephalus (Fig. 1).

A mesencephalic tumor was diagnosed, and a left subtemporal exploration was undertaken. The left peduncle was seen to be distended. A pedunculotomy was performed and a biopsy of the lesion was obtained. The pathological report was that of tuberculoma, and the surgical procedure was interrupted without trying to remove the lesion, in order to avoid sequelae.

Medical treatment with rifampin, 600 mg/day, and ethambutol, 25 mg/kg/day, was immediately started. During the next weeks, symptoms gradually disappeared. Eight months later, the patient was totally asymptomatic and working as a teacher. A CT scan in November, 1980, showed a minute lesion that was visible only after contrast administration; it was thought to be a residual scar (Fig. 2).

The patient is still under specific treatment with tuberculostatic agents (rifampin, 400 mg/day, and ethambutol, 15 mg/kg/day).

Discussion

Only 8% of tuberculomas of the brain are found in the brain stem.1 Brain-stem tuberculomas generally show a clinical course similar to that of infiltrative tumors in this location. Microsurgical techniques permit the diagnosis of most brain-stem tumors with low
G. Bravo, et al.

FIG. 1. Computerized tomography scan, unenhanced (left) and after contrast administration (right), showing the lesion in the left mesencephalon.

Fig. 2. Computerized tomography scan after contrast administration, 6 months after medical treatment was begun. A minute lesion, interpreted as a residual scar, can be seen in the left mesencephalon.

We think that when a tuberculoma is found during exploration for a supposed brain-stem tumor, treatment with tuberculostatic agents and monitoring of the growth of the lesion with serial CT studies is probably better than trying to achieve a radical removal. Only if such treatment has proved not to be efficacious and the clinical course progresses should a second surgical procedure to remove the lesion be considered.

References


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