Intrasellar cysticercosis

Case report

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Cysticercosis of the pituitary fossa is a rare finding. A case is described in which intra- and suprasellar cysticercosis produced disturbances in both visual acuity and visual fields. On clinical examination, angiography, and computerized tomography, it simulated an intrasellar tumor with suprasellar extension. The diaphragma sellae was absent.

KEY WORDS: • cysticercosis • basal meningitis • optic chiasm • sella turcica

Cerebral cysticercosis is endemic in Mexico, with an incidence of 3% in the general population. It is asymptomatic in 40% to 50% of patients, and the commonest symptom is intracranial hypertension, which occurs in 36% to 50% of cases (average 43%). In Mexico, between 70% and 80% of intracranial hypertension is caused equally by either brain tumors or cysticercosis. Cysticerci can be located in any region of the cranial cavity, which explains the variability of signs and symptoms. Basal meningitis is the most frequent clinical presentation, and is often accompanied by cyst formation. The presence of cysticerci in the pituitary fossa is a rare occurrence that has been suspected clinically and has been reported as an autopsy or a surgical finding. This report is of a case of intra- and suprasellar cysticercosis which presented as a pituitary tumor.

Case Report

This 31-year-old right-handed male dentist was admitted from Tlaxcala, Mexico, on September 5, 1982, to the neurology and neurosurgery service of the Hospital Juárez SSA, Mexico City. Seven months before his admission he had had loss of vision in both temporal fields, which, 1 month before his hospitalization, progressed to almost total blindness. He did not have headache, seizures, gait disturbance, or endocrinological abnormalities.

Examination. On physical examination, the patient’s appearance was appropriate for his age, and he was lucid. The ocular fundi revealed slight pallor of the papillae. His visual acuity was reduced to finger counting at a distance of 4 m, with ability to identify colors. Visual fields showed a bitemporal hemianopsia. The remainder of the neurological examination was normal.

Skull radiography was normal. Arteriography showed the right carotid artery to be compressed to the left, with elevation of the A1 segment of the right and left anterior cerebral arteries. Computerized tomography (CT) demonstrated a cystic process that distorted the intrasellar region and extended into the suprasellar area (Fig. 1).

Operation. A right transfrontal cranial approach was selected to expose the chiasmatic region. The optic nerves and chiasm were elevated and the arachnoid in the region showed signs of inflammation. Two cysticerci were removed from the prechiasmatic area and it was observed that the diaphragma sellae was absent. Within the sella turcica were two more cysticerci which were punctured, yielding 5 ml of xanthochromic fluid; the cysts then collapsed. The two cysticerci together with their scolexes were removed with cupped forceps. The hypophysis was compressed downward and backward.

Postoperative Course. One week after surgery both visual fields and visual acuity were 80% improved. The patient was discharged from the hospital.

Comment

This patient had both intra- and suprasellar cysticerci, which is a rare finding. However, basal meningitis is the most frequent clinical presentation of cysticercosis when it is associated with absence of the diaphragma sellae, and may explain the presence of cysticerci inside the sella. Our case differs from that of
Prosser, et al., in the number of cysticerci found and the absence of the diaphragm.

Intra- and suprasellar cysticerci should be differentiated from other cystic processes such as pituitary adenoma,26 craniopharyngioma,2 arachnoid cysts,21 empty sella syndrome,13,22 and intrasellar abscess.8 Removal of the cysticerci in this case led to a satisfactory outcome.

References

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