CASE REPORT

HUMAN OCULAR SPARGANOSIS IN SOUTHERN BRAZIL

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SUMMARY

We report the first case of human ocular sparganosis in the state of Santa Catarina, southern Brazil. A young female patient presented with three periocular moveable inflammatory masses in her right eye, during two years. By surgical excisional biopsy, a helminth larval stage was removed and identified as sparganum. Clinical, laboratory and epidemiological data on this parasite are presented.

KEYWORDS: Human ocular sparganosis; Spirometra; Sparganum.

INTRODUCTION

Sparganosis is a parasitic infection caused by the second larval stage of a cestode of the class Cestoidea, order Pseudophyllidea, family Diphyllobothriidae, genus Spirometra. The natural hosts are wild and domestic canines and felines. These animals release embryonated eggs (coracidia) in their feces. The parasite then passes through two intermediate hosts: the first is a member of one of several genera of cyclopid copepod crustaceans. The copepod ingests the coracidia, which then develop in its tissues into the first larva (procercoid). The second larval stage (plerocercoid or sparganum) develops in the second intermediate host, a vertebrate, which may be an amphibian, reptile, bird, small rodent, nonhuman primate, or pig, when it ingests the infected crustacean. Infection of human beings is accidental, and occurs worldwide, most often in Asia where hundreds of cases have been recorded. Asian cases occur mainly through the local application of infected meat of snakes and frogs to the human skin, eyes and vagina, as an anti-inflammatory treatment. In America, Europe and Australia, human infection is mainly caused by ingestion of water contaminated by infected copepods. Because the sparganums do not mature to adults in these hosts, they encyst again after passing the intestinal wall, migrating through the tissues. In this manner, the sparganums have been found mainly in subcutaneous tissues, in lymph ganglia, in the conjunctiva, in the viscera and in the cerebrum, where they produce varied pathological changes with corresponding symptoms.

In Brazil, studies by GUTIERREZ et al. (1977) and OGASSAWARA & BENASSI (1980) concluded that the species Spirometra mansonoides is indicated as one of the etiological agents of the disease.

CASE REPORT

A young adult female patient, native to the interior of Santa Catarina State (SC), was referred to the ophthalmology service of the Hospital de Clínicas de Porto Alegre, in the state of Rio Grande do Sul (RS), complaining of pain in the right eye and frontal region. She reported the presence of three inflammatory nodules that had changed their location in the periocular region, including subpalpebral space, over the last two years. Two of them became stationary in the inferior temporal bulbar conjunctiva three weeks before the hospital consultation. The third one had been developing for three months, and over a 24-hour period, had moved to the nasal bulbar conjunctiva. Clinical examination revealed the presence of three inflammatory nodules that had changed their location in the periocular region, including subpalpebral space, over the last two years. Two of them became stationary in the inferior temporal bulbar conjunctiva three weeks before the hospital consultation. The last one had been developing for three months, and over a 24-hour period, had moved to the nasal bulbar conjunctiva. Clinical examination revealed the presence of two non-specific inflammatory granulomatous masses in the inferior bulbar conjunctiva, with edema, and red spots on the lower eyelid. These granulomatous masses undergone excisional biopsy. During the surgical procedure an inert, whitish structure was identified inside each granuloma. They were enrolled during removal and revealed a flat, resembling a parasite, measuring approximately 0.3 X 5.5 cm.

After three months, the third mass reappeared and became fixed at temporal superior bulbar conjunctiva, at this time without granulomatous reaction (Fig. 1). The third parasite was either removed surgically. All the post-operative recoveries were uneventfully, with no damage to the patient’s eyesight (Fig. 2). After the larvae were removed, the inflammation receded and her clinical picture improved. The formalin-preserved materials were sent to the Parasitology Laboratory of the...
RESUMO

Esparganose ocular humana no sul do Brasil

Registra-se o primeiro caso de esparganose ocular humana no estado de Santa Catarina, sul do Brasil a partir de paciente adulta que apresentou três massas inflamatórias móveis periculares, localizadas no olho direito, durante dois anos. Com a excisão cirúrgica o material foi para a biópsia e um estágio larval de helminto foi identificado como espargano. Dados clínicos, laboratoriais e epidemiológicos são apresentados neste trabalho.
REFERENCES


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