

SUBCUTANEOUS HYDATID CYST

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ABSTRACT

The authors describe a case of subcutaneous hydatidosis in a 62-year-old woman. The cyst appeared in the right lumbar region as an elastic nodule of about 3 cm diameter. The overlying skin appeared normal. Histologically in the deep dermis and in the subcutis multiple isolated cystic formations of different sizes composed of an intensely PAS positive wall of concentric lamellar structure were present. The inner surface showed small nuclei immersed in a granulous cytoplasmatic mass. Within this cystic cavity daughter cysts and scolices were observed. Thorough examinations failed to reveal involvement of other organs.

KEY WORDS

hydatidosis, echinococcus granulosus, extravisceral echinococcus cyst

INTRODUCTION

Hydatidosis is in various parts of the world a frequent parasite infestation caused by larvae of *Echinococcus granulosus* and, less frequently, *Echinococcus multilocularis* (1). The adult form of this cestode lives in the small intestine of dogs, its definitive host. With the faeces the eggs of the parasite are deposited in the environment from where they can infest man, the intermediate host, in various ways. The most frequently attributed way of infestation is the digestive-

portal-hepatic way (2). Other authors have hypothesized alternative ways such as: the digestive-haemo-lymphatic, the digestive-biliary-hepatic, the haematic-extrahepatic as well as the transcutaneous, transmucous and aerogenous (3). Consequently, while the liver and the lung are the most common sites of the disease, other areas are less frequently involved and cases with only extravisceral infection sites are extremely rare (4).

CASE REPORT

A 62-year-old woman presented in the right lumbar region a firm, elastic nodule of a diameter of 3 cm, mobile on both, surface and deep planes, covered with healthy asymptomatic skin. A surgical excision was performed. Macroscopically the lesion appeared like a cyst.



Fig. 1: Different sizes of hydatid cysts in the deep dermis (HE 20 x)

The histological examination showed in the deep dermis and in the subcutis multiple isolated cystic formations of different sizes embedded in fibrous connective tissue with a moderately dense lymphohistiocytic infiltrate (Fig. 1). The cysts were characterized by an intensely PAS positive wall of concentric lamellar structures with small nuclei immersed in

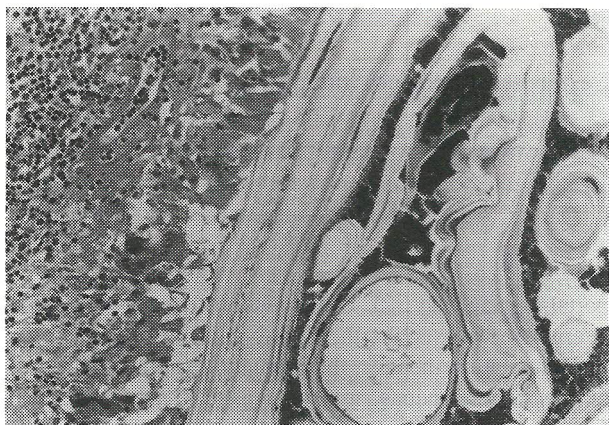


Fig. 2: The different strata of the cyst wall: proliger, chitinos, pericystium (HE 200x)

a granulous cytoplasmatic mass on its inner surface and contained in their cavities daughter cysts and scolices (Fig. 2, 3). A moderately dense granulomatous reaction with numerous multinucleated giant cells surrounded the chitinos, whereas in the periphery a lymphocytic infiltrate with eosinophils was observed in the context with fibrosis (Fig. 4).

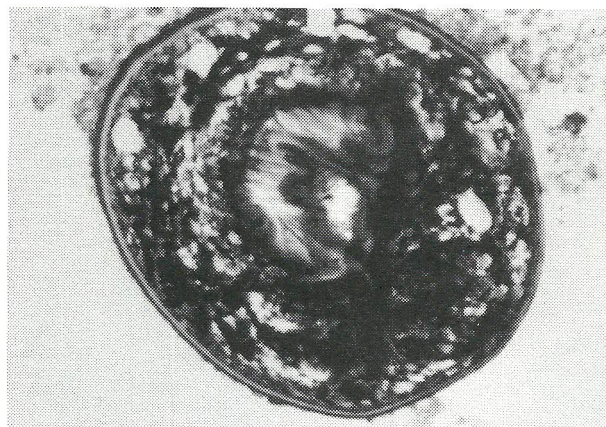


Fig. 3: Scolex: the hooks inside the scolex are visible. (PAS 800 x)

Based on this histological features a diagnosis of fertile hydatid cyst was made.

Thorough examinations were carried out to assess the involvement of other organs, but revealed negative results.

At about one year's distance no relapses or hydatid visceral involvement were observed.

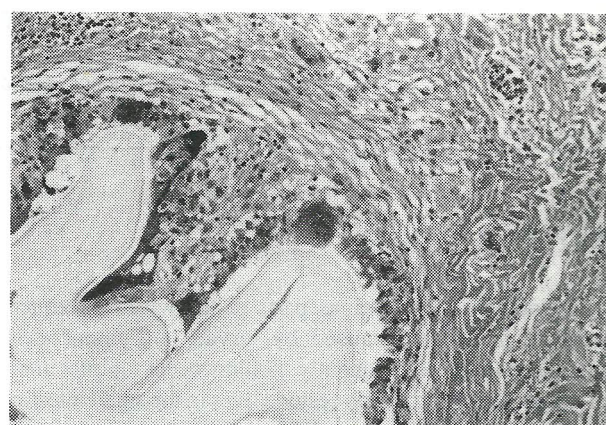


Fig. 4: Granulomatous reaction with numerous multinucleated foreign body giant cells surrounding the chitinos (HE 100 x).

DISCUSSION

In our opinion this case should be one of those very rare forms of primary extravisceral hydatidosis from *Echinococcus granulosus*. Considering the surface localisation of the cyst, we hypothesize a case of direct infestation.

Though rare, the likelihood of a primary skin localisation of the disease, moreover suggests that, especially in regions where the disease is endemic, such as ours (5), greater care should be taken when excising a subcutaneous cyst-like neof ormation lest careless manoeuvres such as partial biopsies or needle biopsies should lead to dissemination of the parasite.

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