

TAENIA ECHINOCOCCUS CYST IN THE LEFT RECTUS MUSCLE

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Hydatid cysts in the liver are not a rare occurrence whilst echinococcosis of muscle is less frequent and we have not found any reports of infestation of the Rectus muscle.

Case history

The patient, a boy of five years, was referred to the surgical out-patient clinic on the 25th January, 1968, for an abdominal mass, which was hard on palpation, mobile, not tender, about $1\frac{1}{2}$ inches in diameter, situated in the left upper quadrant of the abdomen one inch below the costal arch.

The child's mother stated that she had

accidentally noticed the lump when she had examined the child after a fall which had occurred a few days previously; she added that her son had not complained of anything but she was very apprehensive because her first husband — not the child's father — had died at the age of thirty-eight years of an "abdominal tumour". Her husband's case notes showed he had died twelve years before of an inoperable carcinoma of the colon.

Examination

The patient had no complaints and gave the impression of being an active child — perhaps too active. On palpation,

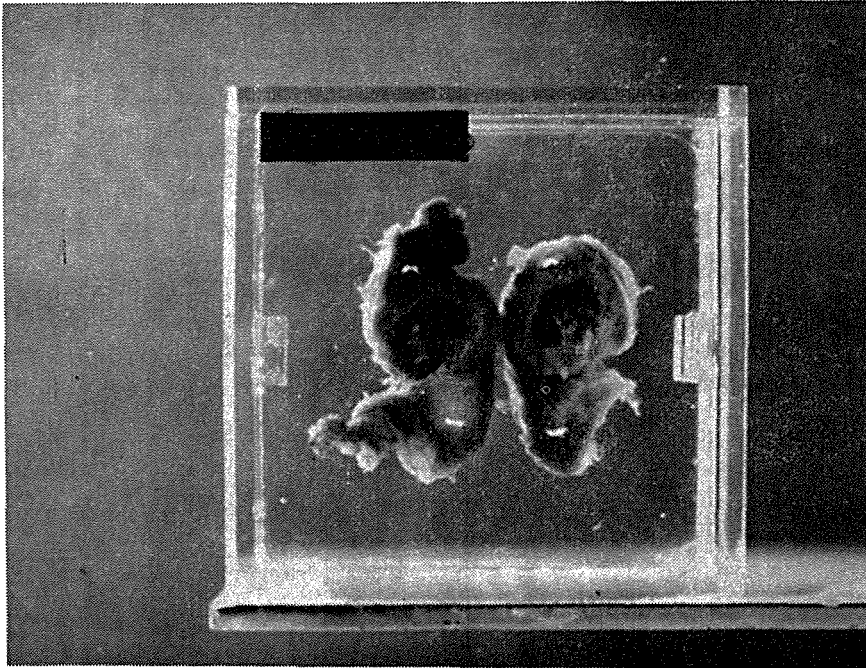


Fig. 1

a well defined globular lump was easily detected deep to the skin, in the musculature of the upper third of the left Rectus. It measured almost one inch in diameter, was not tender and was freely mobile; its surface was not lobulated and the overlying skin was normal. Examination of the rest of the body revealed no other abnormality.

Operation

The lump was removed en masse on the 28th January, 1968. It was cystic and measured $1\frac{1}{2}$ by 1 inch. Macroscopically, it consisted of a whitish membrane lining a fibrotic cyst, the whole of which was surrounded by dense connective tissue (Fig. 1). Histological sections showed a cyst with a greyish wall and with smaller cysts in the cavity. A collapsed cyst was also present. The pathologist's report said that muscle and fibrous tissue lined a cystic space; the lining was densely permeated by eosinophils and by some lymphoid cells; necrosis was present but no calcification. The acellular hyaline cuticle of *Taenia echinococcus* was fused to the invaded tissue as a laminated membrane. Brood capsules and scolices were not present.

Following this pathological report further relevant information was sought. The mother volunteered the information that her son had been in frequent contact with a dog up to three years previously, when the animal had to be slaughtered because of an "itching disease". She also stated that the patient, still very fond of dogs, regularly frequented his aunt's farm where three dogs as well as a herd of cattle were kept.

The child has been re-examined and no untoward signs or symptoms have so far been elicited. The Casoni test carried out on him, as well as on three other members of the family, was negative. Blood counts and pictures were repeatedly normal.

Discussion

Cases of Echinococcosis in muscle have been reported at the following sites: posterior parts of the trunk, inner side of thigh, neck and upper arm (Dew H.R. 1928; Adams H.B., 1962). The authorities consulted expressed the view that human echinococcosis is extremely rare in muscle even in countries such as South America, New Zealand, Iceland and Australia where

hydatid disease is common. Faust (1961) states that the liver is most frequently involved and that on the basis of statistics compiled by various authors, muscles are invaded in only 0.7 to 9.1 per cent of cases. He goes on to say that usually there is no clinical evidence of invasion of muscle unless the individual cysts rupture forcing out the scolices and causing a large number of daughter cysts to form.

Professor A. W. Woodruff (1968) of the London School of Hygiene and Tropical Medicine stated: "I have not personally come across hydatid cysts in this situation (Rectus muscle), but in the Australian Register of Hydatid Disease virtually all organs of the body were found to have been invaded in at least one case. A point of importance is that the liver is the organ most frequently invaded and it has been found that if a cyst is present in some part of the body other than the liver

there almost invariably is a cyst in the liver as well." Professor Woodruff would not, however, personally recommend that such a hepatic cyst be explored unless there were other definite untoward symptoms resulting from it.

Acknowledgements

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