Abstract

A case of primary splenic hydatid cyst in a boy is described. Attention is drawn to the rarity of the lesion, the probable mode of spread and difficulties encountered in its diagnosis.

Introduction

The word echinococcus is of Greek origin and means “hedge hog berries” because multiple cysts resembling berries and hooklets present a bristling appearance. The word hydatid is also of Greek origin and means a drop of water. Infestation with echinococcus granulosus is prevalent especially in villages where sheep, dogs, and mail live in close contact with one another. Dogs and other members of canine family are the hosts of the parasite, harbouring in their jejunum many tiny adult tape worm which are 3-6 mm in length. In man the echinococcus embryo enters the venous channels of the portal system, thus reaching the liver. Some however may pass through the liver and enter the inferior vena cava, thereby gaining access to other organs and tissues. The ova then form a hydatid cyst of the liver (75%) and other viscera (25%) (Katran, 1977). Some investigators believe that the embryo may gain access to the lymphatics of the intestine thus explaining the occurrence of hydatid cysts at sites other than the liver. According to Barret and Thomas (1952) 55 to 60% of the cysts are firmed in the liver, 30% in the lungs, 2.5% in the kidneys, 2.5% in the heart, 2% bone, 1% in muscles, 0.5% in brain, 1.5% in the spleen and other sites. The parasite echinococcus granulosus can thrive in any part of the human body but the lungs and liver are the common sites. Hydatid cyst of spleen is not a common occurrence. Only a few cases have been reported from Pakistan. Hamdani (1977) reported one case, Gardezi and Ehsan (1978) reported two cases.

Case Report

The patient S, aged 12 years was admitted in Surgical Unit of Lahore General Hospital, on 1-11-1980, with a history of slow growing mass in the left hypochondrium for the last 112 years. The patient also complained of dull dragging type of pain low grade intermittent fever, constipation off and on and yomitting occasionally. He had no urinary or other complaints. On examination patient looked pale. The local examination of abdomen revealed a large mass 35 x 25 ems, in left side of abdomen extending from under the left costal margin into the left lower abdomen. The mass was firm in consistency, mobile, nontender with well defined margins and moved with respiration. No pulsation or fluid thrill were noted in the mass. Percussion note was dull. Liver and kidney were not palpable. Other systems were normal.

On investigating urine examination was normal. Hb. 9.2 GM%, ESR 15 mm after 1st hour by Westcrgreen method. Istal and differential leucocytic count were normal with 4% cosinophils. Casoni’s test w as weakly positive. Plain x-ray abdomen showed a circumscribed soft tissue shadow in the left hypochondrium and left loin. The scan showed moderately enlarged liver image, no focal defect were seen. Spleen was not outlined. Provisional diagnosis of splenic cyst was made. An exploratory laparatomy through upper left paramedian incision was undertaken on 15 November, 1980. After opening the pelitoneum a huge
spleen bulged out and the incision was extended towards the left subcostal region. Splenectomy was carried out. The spleen weighed 2 kg and measured 30x20 cms. The cut specimen showed two distinct hydatid cysts replacing the splenic tissue (Fig. 1 and 2).

Fig. 1 Photograph shows cut section of spleen.
Discussion
Echinococcus granulosus is known to thrive in any part of the body but in 75% of cases it does so in
the liver. The right lobe of the liver is commonly involved (Kattan, 1977).

The hydatid cyst of the spleen is reported to occur in 2.3% of all cases in Iraq (Talib, 1968), 1.5% in India (Barret and Thomas, 1952; Mukerjee et al., 1973) and 4.1% in Iran (Ernamy and Asadian, 1976). Gardezi and Elisan (1978) have reported two cases but both were over forty years old. First case with disease duration of 3 years showed calcified spots on plain x-ray abdomen and Icucocytosis and in other case with duration of 1 year.

Hamdani (1977) reported a case of 30 years multiparous women with a raised E.S.R. and lateral shifting of left kidney. In our case the only positive laboratory findings was cosinophil Count of 4%.

The cyst may arise from the upper or the lower pole and occasionally from diaphragmatic surface of the spleen. It may adhere to the diaphragm by vascular adhesions which may give rise to troublesome bleeding at the time of surgery. Rarely it may destroy the whole spleen and in such circumstances the left kidney may he displaced downwards. The cyst may occasionally be calcified and may be seen on radiographs, at times it is difficult to differentiate between a left hepatic cyst and a left renal or splenic cyst. In such cases retroperitoneal oxygen in-su ifiation with intravenous pyelograph may determine the nature of the lesion. The most important factor in diagnosing hydatid disease is awareness of its possibility.

References