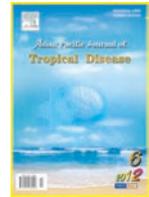




Contents lists available at ScienceDirect

Asian Pacific Journal of Tropical Disease

journal homepage: www.elsevier.com/locate/apjtd

Document heading doi: 10.1016/S2222-1808(12)60108-X © 2012 by the Asian Pacific Journal of Tropical Disease. All rights reserved.

Hydatid disease presenting as multiple cystic swelling in the right supra-clavicular region

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ARTICLE INFO

Article history:

Received 13 August 2012

Received in revised form 27 August 2012

Accepted 4 December 2012

Available online 28 December 2012

Keywords:

Hydatid disease

Cystic swelling

Supraclavicular region

ABSTRACT

Hydatid disease (*Echinococcus granulosus*) is endemic in the Middle East as well as other parts of the world including India. Even though hydatid cysts can occur in any organ, infestation by hydatid disease in humans most commonly occurs in the liver because it acts as the first filter followed by the lung, which forms a second filter. The two organs can be affected simultaneously. After entering the systemic circulation it may be distributed in various organs including brain, orbit, parotid gland, vertebrae, bones and even palm and sole. Some other organs may also be rarely affected, but presentation as lymph node swelling in the supraclavicular region is very rare. The purpose of this paper is to emphasize the fact that supra clavicular lymph node swelling may be a presenting feature of hydatid disease, especially in endemic areas of the world.

1. Introduction

Echinococcus granulosus is a parasitic tapeworm that requires two hosts to complete its life cycle^[1]. Ungulates (deer, domestic cattle, domestic sheep, elk, and moose) are intermediate hosts for larval tapeworms, which form hydatid cysts in their body cavities. Canids (wolves, dogs, and foxes) are definitive hosts where larval tapeworms mature and live in the small intestine. Definitive hosts are exposed to larval tapeworms when ingesting infected ungulates. Human beings are infected by direct contact with infected dogs (handling or fondling) or by taking uncooked vegetables contaminated with infected canine faeces. Although hydatid disease is worldwide in distribution, it is mostly endemic in cattle and sheep-raising regions of the world such as the Middle East, Central Europe, the Mediterranean countries, South America, Australia, New Zealand, and South Africa^[2]. Hydatid cysts commonly affect the liver and lung^[3–5]. Extensive literature search shows that it can also affect the brain, heart, kidney, ureter, spleen, uterus, fallopian tube, mesentery, pancreas, diaphragm, and muscles.

Subcutaneous presentation or lymph node involvement is very rare.

2. Case report

Salma Bibi, a 22 years old Muslim female, mother of two children from Purba Midnapore, West Bengal, attended in the OPD of Calcutta School of Tropical Medicine, West Bengal, with chief complaints of multiple cystic swelling in the right supra-clavicular region and left supra clavicular groove. The swelling was persisting for last three to four years. There is no history of jaundice, anaemia, weight loss, fever or constipation. On palpation the swelling was non-tender and discrete in nature. A plain X-ray of the chest on PA view demonstrated no abnormality. Blood examination report showed a normal hemoglobin and RBC count. Total WBC counts were 12400/ μ L (N-69%, L-28%, E-2%, M-1%, B-0). Mantoux test and Eliza test for tuberculosis were negative. Normal haemogram and absence of any abnormal cells excluded any haematological malignancies.

Observing the above report, fine needle aspiration cytology (FNAC) was done. Smear showed a few scattered mixed inflammatory cells and fragmented mucoid proteinaceous material, which was suggestive of parasitic body. USG study of abdomen revealed mild hepatomegaly. Multiple welldefined anechoic cystic lesions of varying sizes and shapes (largest measuring about 6 cm in longest dimension) noted in both lobes of liver. Some of these

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cysts revealed internal septae, peripherally arranged small daughter cysts, floating undulating internal membranes. Rest of the internal organs was within normal limit. CECT abdomen showed multiple welldefined, multi-septate, and multi-loculated cystic lesions in both lobes of liver (Figure 1 and Figure 2). The diagnosis was confirmed by finding of IgG of *Echinococcus* antibody positive (2.89) (Above 0.3 was positive). The patient was started Tab Albendazole (10 mg/kg per day) orally. After three weeks of therapy the cysts started to regress, and on completion of three months course there was complete regression.

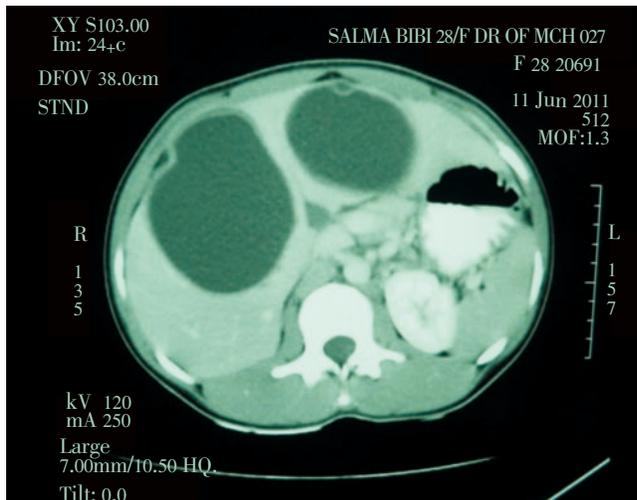


Figure 1. CECT scan of abdomen showing two hypo dense cystic lesions in both lobes of liver.

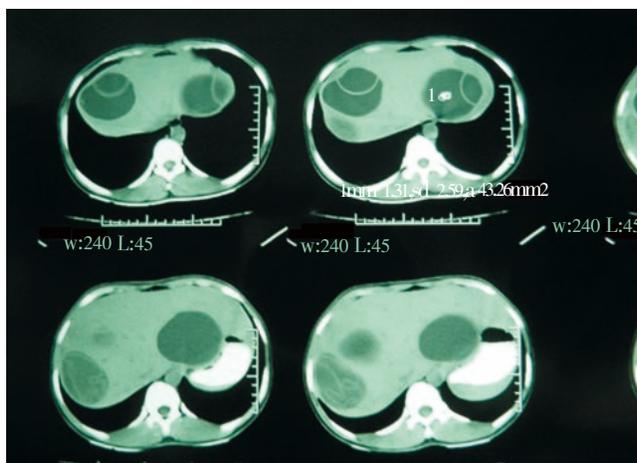


Figure 2. CECT scan of abdomen showing multiple hypo dense cystic lesions with internal septae in both lobes of liver.

3. Discussion

Hydatid disease may affect many organs other than lung and liver. Extensive literature search showed that it can affect thyroid gland presenting as stridor^[6,7]. It may present in the nasopharynx and skull involving cervical vertebra or as cervicomedial mass causing dyspnoea^[8,9]. Another very rare presentation is involvement of testis^[10]. Reports of involvement of deltoid muscle or even parotid gland are there^[11,12]. Axillary lymph nodes involvement may be possible though rare^[13]. Hydatid disease presenting as supraclavicular lymph node enlargement is not reported yet.

Though rare, suspicion of this disease is justified in cases

of supraclavicular lymph node enlargement especially in endemic regions.

Conflict of interest statement

We declare that we have no conflict of interest.

Acknowledgements

We are thankful to the Director of Calcutta School of Tropical Medicine, Professor Krishnangshu Ray for giving us permission to use the necessary documents for writing the research paper. We are also thankful to Professor and Head of the Department of Tropical Medicine, Dr. Bibhuti Saha and Professor of Tropical Medicine, Dr. R.P.Goswami, both from Calcutta School of Tropical Medicine for their sincere contribution and approval.

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