

MULTIPLE HYDATID CYSTS

by

K. PADMA RAO,* M.D.

Hydatid disease although a public health, medical and surgical problem sometimes poses as a gynaecological emergency. The Greek word "HYDATID" means a drop of water, describes aptly this condition—(Reddy and Raju 1974). The parasite in question is *Echinococcus granulosus* which requires 2 mammalian hosts—the definitive one being dog, wolf or fox, and the intermediate the man, pig, sheep or cow. Human Infestation by *Echinococcus* is Endemic in India and the lesions are localised in Liver or Lung (Reddy and Sarada 1966). Although the condition is more common in females and in the middle age group (Upadhyaya 1974) yet the incidence in female pelvic organs ranges from 2% (Chatterjee 1952) to 0.2% (Craig and Faust 1951) of all hydatid cysts. Most of these cases had never been diagnosed preoperatively inspite of the fact that there is a high incidence of hydatid disease in this country, probably because pelvic involvement is very uncommon. The present report deals with an interesting case wherein multiple hydatid cysts were located not only in the broad ligament, but also in the lung, liver, spleen and omentum.

CASE REPORT

H-emaciated nulliparous woman aged 50 years was admitted on 25-11-1974 with a mass in the

*Professor of Obstetrics & Gynaecology, Karnatak Medical College, Hubli.

Accepted for publication on 1-6-78.

abdomen for the past 8 years and severe pain in the lower abdomen since 6 months.

On examination the suprapubic mass was a multinodular swelling, firm, mobile, tender and was of 24 weeks pregnancy size.

On bimanual vaginal examination a preoperative diagnosis of malignant ovarian tumour was made.

An X-Ray of the chest revealed a cavity in the right lung diagnosed as lung abscess for which antibiotics were given along with anti-anaemic treatment. A repeat X-ray showed the cavity to be persistent. In retrospect this was diagnosed as hydatid cyst of the right lung; her E.C.G. was normal. Laparotomy was done on 11-1-1975 explaining all the risks and with two bottles of blood on hand.

Under epidural anaesthesia abdomen was opened. The mass was found to be arising from the right broad ligament adherent to the posterior aspect of the uterus and obliterating the ovarian tissue and burroughing retroperitoneally. During dissection the cyst burst and plenty of daughter cysts escaped. As the large intestine was densely adherent to the cyst wall it was injured. A panhysterectomy followed by a colostomy was performed. On exploration 4 sessile hydatid cysts of size of a cricket ball were excised from the omentum. There were 3 cysts arising from the liver and 1 from the spleen which was palpated but not dissected as the operation had lasted more than 3 hours. The patient had a smooth postoperative period. On 25-1-1975 she was transferred to the surgical side for further treatment.

Barium enema was done to exclude stricture of the rectum. On 10-3-1975 the colostomy wound was closed with resection anastomosis. The patient recovered and was discharged on 20-3-1975. Follow up of the patient is being done till today and she is free from any complaints and is happy and alive.

Discussion

It is pertinent to mention that in this case there was not a single cyst but 10, the primary being in the liver and the rest occurring as secondary cysts.

There are several types of dissemination:

(1) Rupture of the hepatic hydatid cyst with implantation of the scoliosis on the peritonium causing seed hydatid or hydatidosis (Dew 1974).

(2) The embolic spread through the hepatic vein leading to metastatic secondary sites.

The pathogenesis is queer. *Echinococcus granulosa* is attached to the villi of the small intestines of the definitive host i.e. dog. When an ovum is swallowed by an intermediate host i.e. man the embryo penetrates the duodenal mucosa and enters the portal system thus reaching the liver, spleen, kidney, peritoneum, pelvis, broad ligament, uterus, breast and even brain. Hence no organ or tissue is spared;

The clinical manifestation depends upon the organ involved.

Diagnosis

Casoni's test is positive in 90% of cases (Reddy and Sarada 1966) and only 50% of the surgically proved cases (Sibal and Singh 1974). In this case preoperative diagnosis was not made but the condition must be kept in mind in endemic areas.

Treatment

Excision of the cyst is the treatment of choice. Some hydatid cysts are symp-

tomless wherein spontaneous recovery may occur with discharge of the cysts into the natural channels. Chronic cysts are seen wherein secondary infection, resolution or calcification occurs. In this case although the cyst ruptured no anaphylactic shock or peritonitis occurred. It is surprising to note that inspite of this hazard and the presence of multiple cysts the patient had a rapid and smooth recovery.

Conclusions

An interesting case of pelvic hydatid cyst with secondary hydatidosis is reported. A brief discussion is done on the pathogenesis and prevention.

Acknowledgment

Thanks are due to Dr. J. Leelavathy Reddy, B.Sc., M.S., D.G.O., Professor and Head of the Department of Obstetrics & Gynaecology, Medical College Hospital, Bellary, for permitting me to report this case.

References

1. Chatterjee, K. D.: Human Parasites and Parasitic Diseases, 1952, Published by Chatterjee, K. D., 6, Amrita Banerjee Road, Calcutta 26.
2. Craig, C. F. and Faust, C. E.: Clinical Parasitology, 1951, Kipton, London.
3. Dew, H. R.: Cited by Ref. 1.
4. Reddy, D. B. and Sarada, D.: Cited by Ref. 7.
5. Reddy, D. B. and Raju, C. G.: J. Indian Med. Assoc. **63**: 267, 1974.
6. Sibal, R. N. and Singh, P.: J. Indian Med. Assoc. **63**: 211, 1974.
7. Upadhyaya, G. H., Rai, P. and Shah, P. K.: J. Indian Med. Assoc. **63**: 213, 1974.