

# ECHINOCOCCAL CYST OF BROAD LIGAMENT

(Report of A Case)

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Echinococcosis is a world-wide disease but is stated to be more a disease of the temperate climates than the tropics. The endemicity is related to a close association between man, dog and sheep or cattle. In India, the reported incidence seems to be rather low but some regions like the Punjab show a relatively high prevalence of the disease. Sami (1938) has reported 40 cases of hydatid disease in the south-western portion of the Punjab in a relatively short period of six years. In addition, the same author found 26.8 per cent of the dogs and 90 per cent of the cattle in the area afflicted with the disease.

By far the most commonly involved organ is the liver. Although infection of almost every organ in the body is reported, the incidence is very low. Involvement of the pelvic organs occurs in only about 2 per cent of cases (Chatterjee, 1952). A primary hydatid cyst of the broad ligament is observed with extreme rarity—a fact which merits the publication of the present case.

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## Case History

A female patient (no M. 3763) aged 50 years—a housewife, was admitted to the Tata Memorial Hospital, complaining of a vague pain in the lower abdomen for 4 years. She had 5 full-term normal deliveries. Last delivery was 15 years ago. Her periods had been regular. There was no loss of weight.

On examination, the patient was fairly built and nourished. A mobile lump was palpable in the suprapubic region. Vaginal examination revealed a mass on the anterior surface of the uterus. Liver and spleen were not palpable. Examination of other systems was normal.

A diagnosis of fibroid of the uterus was made on the clinical findings.

**Operation Notes:** A laparotomy was performed by a midline incision extending from above the umbilicus to the symphysis pubis. Uterus was found to be normal, but a large cyst with a satellite cyst was seen occupying the left broad ligament. It was surrounded by dense adhesions. Urinary bladder was adherent to the cyst. A total hysterectomy with a left salpingo-oophorectomy was carried out. Patient made an uneventful recovery.

## Pathology

**Gross Description of Surgical Specimen:** Uterus was slightly enlarged in size measuring 9 cm. in length. Uterine wall was thickened and measured about 3 cm. in width. The broad ligament on the left side was occupied by a large cyst measuring 10 cm. in diameter. There was a small

satellite nodule attached to its anterior surface. The cyst was adherent to, and destroyed a portion of the left ovary. Surface of the cyst was irregular and congested. On opening, the cyst was found to be filled with clear fluid and soft, white, gelatinous fragments of the laminated membrane (Fig. 1). A wet preparation of the fluid showed a large number of hooklets and scolices.

**Microscopic Description:** Histological examination showed a thick fibrous pericyst, an inner non-nucleated laminated membrane (Fig. 2) and an innermost germinal layer showing a few degenerated scolices.

Sections from the uterus showed adenomyosis.

### Discussion

Hydatid cyst in the pelvic region when occurring in a female patient poses an interesting gynaecological problem. Clinically, there is nothing distinctive to suggest the true nature of the disease. The patient may have no complaints except a swelling in the abdomen. However, disturbances in the uterine functions and pressure symptoms upon the neighbouring organs are more commonly encountered. Usually, the patients complain of pain in the lower abdomen increasing in severity during menstruation. There may be history of miscarriages, dysuria and occasionally retention of urine. However, the presence of the cyst is not entirely incompatible with normal uterine function, e.g., the case reported by James Oliver (1912) in which an alveolar hydatid cyst was associated with a 3 months' pregnancy. On examination, a tense, cystic swelling is palpable in the pelvis, indistinguishable from other cystic lesions more commonly observed in this region. A similar cyst in an enlarged liver may give a clue to the diagnosis

but such an association is not always observed. Presence of eosinophilia with a positive Casoni's test clinches the diagnosis.

Hydatid cysts of the pelvic organs are usually attributed to rupture of a cyst elsewhere in the abdomen, giving rise to either localized secondary cysts when rupture occurs into the peritoneum, or to multiple metastatic cysts in various parts of the body, when rupture occurs into the blood stream. Lasrado and Swami (1953) have reported a case of a secondary hydatid cyst in the broad ligament 12 years after operation on a hydatid cyst in the liver. Ray (1950) has reported a case and mentions 4 similar cases in the literature, where a hydatid cyst was primarily observed in the broad ligament without an associated cyst anywhere in the body. The present case seems to belong to this category as there was no evidence of a co-existing cyst elsewhere in the body. Ray (loc cit) explains such cases by assuming that embryos, after piercing the intestine, reach the connective tissue beneath the peritoneum or are carried there by blood or lymph.

### Summary

1. A case of hydatid cyst of the broad ligament is reported.
2. It was a primary cyst unassociated with hydatid cyst elsewhere in the body.

### References

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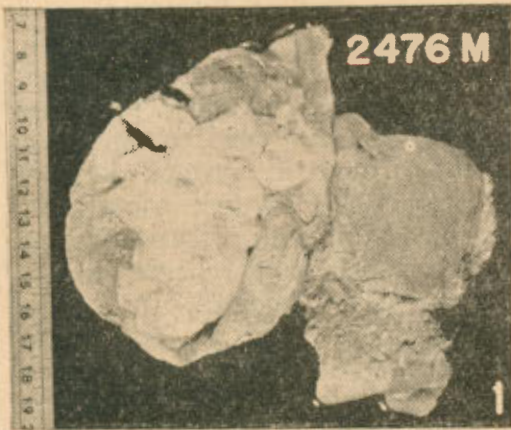


Fig. 1  
Hydatid cyst in the broad ligament, filled with the characteristic gelatinous, white, fragments of the laminated membrane (Posterior view).

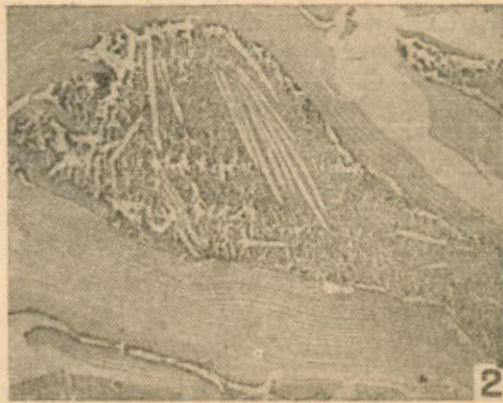


Fig. 2  
Photomicrograph of the section through the satellite nodule showing the non-nucleated laminated membrane, characteristic feature of hydatid cyst. (H & E stain x 110).