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Primary Hydatid Disease of the Uterus – A Case Report

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ABSTRACT

Hydatidosis is a common zoonosis that affects a large number of humans and animals, especially in poorly developed countries. The involvement of the genital tract is rare and the occurrence in the uterus is an extreme rarity. Herein, we report a case of a 35 year old female patient with complaint of on & off lower abdominal pain for 5 years, difficulty in passing urine for 2 years and accidental notice of a hypogastric swelling since 5 days clinically diagnosed as Right ovarian cyst? Carcinoma. On exploring the abdomen a cystic mass was found over anterior wall of uterus extending laterally to the left broad ligament which histopathologically was diagnosed as Hydatid cyst of the uterus. No other hydatid lesion was found in the body and a final diagnosis of Primary Hydatid Disease of the Uterus was made.

KEYWORDS: Hydatid cyst, Uterus, Diagnosis, Echinococcus.

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INTRODUCTION

Hydatidosis is a common zoonosis that affects a large number of humans and animals, especially in poorly developed countries. The infesting parasite has four forms named *Echinococcus granulosus, E. multilocularis,E. vogeli* and *E. oligarthrus* (very rare in humans). The most frequently involved organs are liver followed by thelung.The involvement of the genital tract is rare and the occurrence in the uterus is an extreme rarity[1]. Herein, we report a case of hydatid cyst in the uterus.

MATERIALS AND METHODS

A 35-year-old female patient, a mother of 3 children, had consulted Sihor General Hospital, District Bhavnagar, State Gujarat for Tubal ligation in September 2012. When the surgeon opened up the abdomen, he noticed a cystic swelling within the pelvis. Suspecting an ovarian cyst, he closed the abdomen and referred it to Sir Takhtasinhji hospital, Bhavnagar. On asking details, the patient complained of on & off lower abdominal pain for 5 years, difficulty in passing urine for 2 years and accidental notice of a hypogastric swelling since 5 days.

***Obstetric history*:** She had three normal full term deliveries with the youngest child of age 5 years.

***Menstrual history*:** Menses were regular and normal. She presented on the 5th day of menses.

***Past history & Family history*:** Nothing of any significance

***Personal history*:** Difficultyat times in passing urine for the last two years, otherwise nothing significant.

***Physical examination*:** Vitals were within normal limits. Abdomen was soft. Respiratory and cardiovascular examinations showed no abnormalities.

Investigations: Routine haematological and biochemical investigations were within normal limits. Radiographs of the chest, abdomen& pelvis revealed nothing unusual. An ultrasound of the abdomen showed a 8x8 cm sized cystic lesion with internal septations seen on right side – possibility of Right

ovarian cyst. Other abdominal organs including liver were normal. TVS also revealed a multiloculated cyst.

A *provisional diagnosis* of Right Ovarian cyst? Carcinoma was made *Operation.*

Laparotomy was performed. After exploring the abdomen, uterus was found to be normal in size and shape. There was an approximately 8x7 cm cystic mass on the anterior wall of uterus extending laterally & invading both the layers of broad ligament. A 3x4 cm firm mass was found over the isthmic region of the anterior surface of the uterus. Urinary bladder was adherent to both the cystic and the firm masses which was separated by blunt as well as sharp dissection. Both fallopian tubes and ovaries were normal.. Pouch of Douglas was normal, however the uterus was jammed within it. Intestines were normal and free from the mass. No peritoneal fluid was seen. Total Abdominal Hysterectomy with Bilateral Salphingo-oophorectomy was performed. Small nick was made over the cyst and the fluid directly drained by suction. Rent made over base of bladder while separating it from the mass was sutured in three layers with Vicryl and bladder checked for leakage using methylene blue dye. After appropriate haemostasis and closure, the specimen was sent in formalin to the Histopathology laboratory for further evaluation and examination.

RESULTS

Histopathological Examination

At the Histopathology laboratory, Gross examination of the specimen revealed a normal sized uterus with hypertrophied cervix, Both fallopian tubes and ovaries appeared normal. A 8.5x7.5x1.5cm partially cut open cystic mass was found attached to the anterior surface of the uterus extending to the isthmus almost upto the upper part of cervix wherein the wall was thick and fibrous. The inner surface was yellowish. An enucleated whitish cyst wall with granular inner surface was found with a 2.5x2.5 cm whitish daughter cyst containing clear fluid and having inner granular surface. Microscopically, sections from the main cyst and daughter cyst revealed laminated membrane with well-defined germinative layer and the thick area over the isthmic region showed dense fibrosis with areas of haemorrhage. Overall findings were suggestive of Hydatid disease of the uterus.

Postoperative period and follow-up findings

Follow-up ultrasound revealed no significant finding. Preoperative Radiographs of the chest, abdomen and pelvis and abdominal ultrasound had not revealed any other lesion. CT was not performed as the patient could not afford it.

A *final diagnosis* of Primary Hydatid Disease of the uterus was made & the patient was discharged with prescription of Albendazole therapy for 30 days. She came for a follow up after one month and was now totally asymptomatic.

DISCUSSION

Hydatid disease, also called hydatidosis or echinococcosis, is a cyst-formingdisease resulting from an infection with the metacestode, or larval form, of parasiticdog tapeworms from the genus *Echinococcus*. To date, five species of *Echinococcus* have been characterized. The vast majority of human diseases are from *Echinococcusgranulosus* and *Echinococcus multilocularis* which cause cystic echinococcosis and alveolar echinococcosis, respectively.*Echinococcus* infections are estimated to affect between 2-3 million peopleworldwide with endemics located primarily in regions of North and SouthAmerica, Europe, Africa and Asia associated with the widespread raising of sheepand other livestock[2]. The unusual localization of hydatid cyst in the brain, heart, pericardium, kidney, intraperitoneum, retroperitoneum, bone, soft tissue and breast as rare sites has been discussed in the literature. The localization of the hydatid cyst in the uterus is an extremely rarely encountered entity and highly interesting. Hydatid cyst in the pelvic cavitycan be considered primary when no other cysts are present in the common sites of occurrence. In such a case, a hydatid embryo gains access to the pelvis by either haematogenous or lymphatic routes[3].The incidence of hydatid cyst formation in the female reproductive system constitutes about 0.5% of all hydatid cyst cases[4]. Gueddana and colleagues reported a case with intrauterine hydatidosis whose hydatid vesicles were found in the vagina and a total hysterectomy was carried out. Okumus and co-workers also reported a case in which the primary involvement was uterus and the diagnosis was confirmed by microscopic studies after the surgery[1]. C.J.Hagberg and G.Maizels reported a case of solitary hydatid cyst of uterus which clinically was diagnosed first as intramural myoma[5]. Ishraq Dhaifalah reported a case of hydatid disease of the cervix which was misdiagnosed as an ovarian cyst[6]. Similar few other cases have also been reported [1,3,7-10].

The symptoms of hydatid disease in genital organs are not specific. They can be similar tothose of ovarian cyst or can manifest themselves by extrinsic pressure upon adjacent organs[3].

The correct diagnosis of hydatidosis is verydifficult because there are many similarities between the hydatid cyst and other pelvic malignant diseases on the basis of imaging findings. Daughter cysts may resemble septal structures and mimic complicated ovarian cysts and even ovarian malignancy. Hydatid disease should be considered in the differential diagnosis of cystic pelvic masses, especially in endemic areas[11].

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REFERENCES

1. A.Basgul,Z.N. Kavak, H. Gokaslan And S. Kullu, Hydatid cyst of the uterus, Infect. Dis. Obstet Gynecol. 2002;10:67-70.
2. Hannah Cummings, Miriam Rodriguez-Sosa and Abhay R. Satoskar, Hydatid disease, In A.R. Satoskar, G.L. Simon, P.J. Hotez,M. Tsuji(eds.) Medical Parasitology, 2009; Section III Chapter 21;146-153.
3. B. Namavar Jahromi, A.R. Talei, S.Z. Tabei, Primary Hydatidosis of Uterus and Left Fallopian Tube, Iran J Med Sci June 2007; 32 (2); 118-120.
4. B. Sanu, Kiran Regmi, Hydatid Cyst of Ovary – A case report, Indian Journal of Pathology and Microbiology 1999;42(4), 501-502.
5. C.J.Hagberg and G.Maizels, Solitary Hydatid Cyst of the Uterus, S.A. Medical Journal 12 June 1954; 499-500.
6. Ishraq Dhaifalah, Hydatid Cyst Of The Uterine Cervix, Biomed. Papers 2001; 145(2), 77–78.
7. Anadi R., Anjali B., Palash B., Rita B.M., An unusual case of primary intrapelvic hydatid cyst, Indian Journal of Pathology and MicrobiologyJuly-September 2010;53(3), 588-589.
8. V. Seenu, M.C. Misra, S.C. Tiwari, R. Jain and C. Chandrashekhar, Primary pelvic hydatid cyst presenting with obstructive uropathy and renal failure; Postgrad Med J 1994; 70, 930 – 932.
9. Mehmet Vural, Saban Yalcin, Sema Yildiz and Hakan Camuzcuoglu, Isolated type I pelvic cystic echinococcosis mimicking ovarian tumor, N Am J Med Sci. June 2011; 3(6): 289–291.
10. Hilliard E. Miller And Conrad G. Collins, Echinococcus Disease:Report Of A Case Of Primary Echinococcus Cyst Of The Uterus, Annals Of Surgery . 07/1937; 105(6):886-95.
11. Ahmedt Turan Ilica, Murat Kocaoglu, Nazif Zeybek, Suleyman Guven, Ibrahim Adaletli, Alin Basgul, Hidayet, Coban, Aslan Bilici, Yasar Bukte, Extrahepatic Abdominal Hydatid Disease Caused by *Echinococcus granulosus*: Imaging Findings, AJR August 2007; 189, 337-343.