

Laparoscopic Treatment of Primary Mesenteric Hydatid Cyst

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Received: April 6, 2015

Revised: May 12, 2015

Accepted: May 16, 2015

Published online: June 24, 2015

ABSTRACT

Hydatid disease continues to be a serious public health problem in many countries including Turkey. Hydatid cysts usually locate in the liver and lungs and may develop in any organ of the body. Primary mesenteric hydatid cyst is rare. We aimed to present a case of primary mesenteric hydatid cysts treated laparoscopically

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Key words: Mesenteric hydatid cyst

Yagmur Y, Babur M, Gumus S, Can MA. Laparoscopic Treatment of Primary Mesenteric Hydatid Cyst. *Journal of Gastroenterology and Hepatology Research* 2015; 4(6): 1660-1662 Available from: URL: <http://www.ghrnet.org/index.php/joghr/article/view/1260>

INTRODUCTION

Hydatid cysts are mostly caused by *Echinococcus granulosus* and

common in societies in which agriculture and raising animals are common. Hydatid disease continues to be a serious public health problem in many countries including Turkey. Hydatid cysts may develop in any organ of the body, but occur most frequently in the liver (50%-80%) and lungs (15%-47%), and occasionally in the spleen, kidney, pancreas, diaphragm, intraperitoneal space, heart, ovaries, prostate, incision scar, retroperitoneal space, thyroid, vesica urinaria, orbita, head and neck, chest wall, brain, musculoskeletal and soft tissue, breast, and axillary space^[1,2]. Intraperitoneal hydatid cyst usually develops in relation to liver hydatid cyst rupture^[3]. Primary mesenteric hydatid cyst is rare and diagnoses incidentally^[3,4]. In the PubMed search, so far 7 cases were reported^[3-9]. We aimed to present a case of primary mesenteric hydatid cysts treated laparoscopically.

CASE REPORT

19-year-old female patient with complaints of abdominal pain and nausea for a year admitted to our clinic. At physical examination, there was tenderness with deep palpation in the right upper quadrant. Routine biochemistry and other laboratory values were normal. Abdominal ultrasonography showed a cyst approximately 82×53 mm in favor of hydatid cyst located between the right lobe of the liver and right kidney. Intravenous contrast-enhanced abdominal computerized tomography showed 8×5 cm mass thought to be mesenteric cyst, boundaries with right kidney (Figure 1). Laparoscopic operation was proposed. After insufflating abdomen, trocars were inserted and abdomen was explored. A cystic mass was noticed in the mesentery inferior to hepatic flexure of the colon. Cyst surrounding was packaged with betadine embedded gauze. Cyst was aspirated with Veress needle. Cyst inside was filled with antiscollisidal solution betadine and waited for ten minutes then cystotomy was done and all germinative membranes were put into endobag (Figures 2 and 3). Pericystectomy was done. Patient was discharged without any complication. Albendazole treatment 10 mg/kg dose was prescribed. Pathology report was mesenteric cyst hydatid.

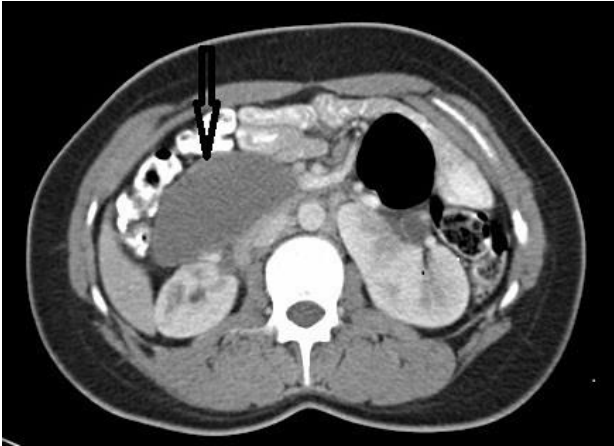


Figure 1 Computerized tomography of mesenteric cyst hydatid.



Figure 2 Mesenteric cyst hydatid aspirated.

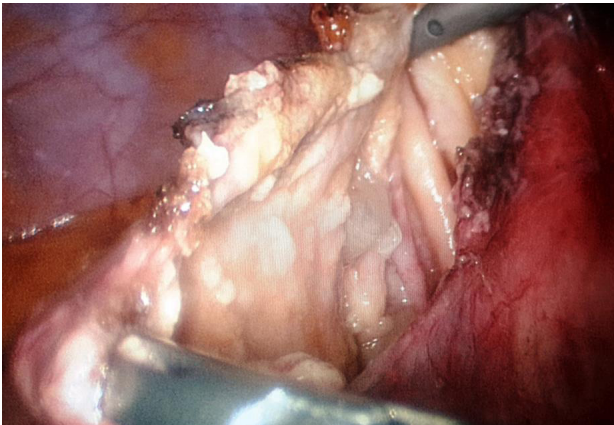


Figure 3 Mesenteric hydatid cyst inside.

DISCUSSION

Hydatid disease is usually located in the liver and lungs^[5]. Extrahepatic hydatid cyst is 14% to 19% of intraabdominal hydatid cyst^[6]. Intraoperative hydatid cyst could be secondary due to spontaneous or traumatic perforation of cyst settled in another organ or primary without any other organ involvement. Mesenteric placement without any focus is very rare^[5]. The mechanism of infestation is not clear; dissemination via lymphatic or systemic circulation has been implicated as a possible route. 7.8. dissemination through the neighborhood organ or post-surgery after the previous hydatid disease are thought to be cause of contamination^[10]. In our case, there was no other organ involvement and accepted primary mesenteric cyst hydatid. Hydatid cyst without complication are

usually asymptomatic^[4,6]. Mesenteric hydatid cyst is a non-specific mass and can cause abdominal pain due to pressure and traction to other adjacent organs. Sometimes it may rupture spontaneously^[3]. Rupture into the peritoneum can cause severe anaphylactic reactions. Systemic anaphylactic reaction rates for intraperitoneal rupture have been reported between 1% and 12.5%^[6]. Serological tests and radiological imaging techniques are utilized for the diagnosis of hydatid cyst. Ultrasound, tomography and magnetic resonance imaging have almost 100% sensitivity and specificity in the diagnosis of hydatid cyst^[9]. Although medical treatment of hydatid cyst with albendazole 10 mg/kg per day result to be successful in a certain ratio, surgical treatment is still the most effective method^[3]. In recent years, percutaneous drainage techniques in the treatment of hydatid cyst has become topic.

CONCLUSIONS

The possibility of mesenteric hydatid cyst should be considered in the differential diagnosis of mesenteric cysts in the areas where the prevalence of hydatid cyst is high.

ACKNOWLEDGMENTS

Yusuf Yagmur operated the patient, participated in the design of the study and prepared the manuscript, Mehmet Babur participated in its design and coordination and helped to draft the manuscript, Serdar Gümüş participated in its design and coordination and helped to draft the manuscript, Mehmet Ali Can participated in its design and coordination and helped to draft the manuscript.

CONFLICT OF INTERESTS

There are no conflicts of interest with regard to the present study.

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Peer reviewer: Ali Coskun, MD, General Surgeon, Izmir Training and Research Hospital, Izmir, Turkey.