

Short Report

Open Access, Volume 3

Fatal hydatid cyst in a pregnant woman

Zahra Javanbakht¹; Mohammad Hossein Golezar^{2*}; Shahrzad Arjmandi³; Samira Golezar³

¹Department of Obstetrics and Gynecology, Motazedi Hospital, Kermanshah University of Medical Science, Kermanshah, Iran.

²Student Research Committee, Faculty of Medicine, Shahed University, Tehran, Iran.

³Department of Midwifery, Faculty of Nursing and Midwifery, Kermanshah University of Medical Sciences, Kermanshah, Iran.

***Corresponding Author: Mohammad Hossein**

Golezar

Student Research Committee, Faculty of Medicine,
Shahed University, Tehran, Iran.

Phone: +98-902-630-1818;

Email: drgolezar@yahoo.com

Abstract

In situations like peritonitis due to bile-duct injuries drains insertion give an opportunity for healing. However in presented case the bile leakage from drains spontaneously stopped. Only constipation leads to icterus. A spontaneous choledoco-enteric fistula explains these conditions, discovered later. It could be the result of inflammation causing adhesion.

Keywords: Bile duct injury; Choledoco-enteric fistula; Laparoscopic cholecystectomy.

Abbreviations: MRCP: Magnetic Resonance Cholangio Pancreatography; ERCP: Endoscopic Retrograde Cholangio Pancreatography; BDI: Bile Duct Injury; CBD: Common Bile Duct; MR: Magnetic Resonance.

Received: Nov 25, 2022

Accepted: Dec 19, 2022

Published: Dec 26, 2022

Archived: www.jcimcr.org

Copyright: © Golezar MH (2022).

DOI: www.doi.org/10.52768/2766-7820/2215

Case presentation

A 30-year-old pregnant woman (G2P1) with a gestational Age of 18 weeks presented to our emergency department with the complaint of right flank pain, nausea, vomiting, and melena. Initial vital signs were Blood Pressure (BP): 110/70, Pulse Rate (PR): 82, Respiratory Rate (RR): 18, and Temperature (T): 37.2. She was hospitalized in the surgery ward due to a massive hydatid cyst in the liver right lobe with fine echo regions (14 × 15 × 17 mm) in the recent Ultrasound (US) report. First-day lab tests include Hb: 7.2, PLT: 446000, ESR: 125, CRP: +2, PT: 12.5, PTT: 33, INR: 1, AST: 34, ALT: 23, ALP: 487, LDH: 440, Bili (T): 0.4, and Bili (D): 0.2.

It should be noted that she also underwent a laparotomy surgery one month ago for drainage and excision of a huge hydatid cyst located between the liver and diaphragm. After surgery, 1100 ml of green-color fluid was discharged from the cyst. Then, the patient was discharged in good general condition under medication orders.

Presently, the patient was visited by obstetrics & gynecol-

ogy service and fetal US scan was performed and an alive fetus with detectable Fetal Heart Rate (FHR) was observed. She got ceftriaxone and clindamycin and was nominated for Percutaneous Interventional Drainage [PAIR] (percutaneous aspiration, injection, reaspiration) of the hydatid cyst under US guidance. Therefore, after routine echocardiography (EF: 55%) and 1 unit packed-cell transfusion, she underwent PAIR under sedation and locational anesthesia, and cardiopulmonary monitoring. The vital signs were stable and about 1200 ml of fluid was discharged.

After the procedure, the patient experienced cyanosis and decreased level of consciousness and O₂-saturation surprisingly. Immediately, code 99 was announced, and after airway and O₂ therapy with a reversal bag mask, Ringer's lactate serum and dextrose were injected. Also, hydrocortisone had been injected before and after the operation. She had sinuous tachycardia on ECG and acidosis was detected based on performed VBG below: PH: 6.9, PCO₂: 55.4, PO₂: 39, HCO₃: 12.2, O₂ Sat.: 44.4%, and TCO₂: 13.9.

Therefore, according to acidosis, decreased O₂-saturation,

and gasping breathing, she was admitted to ICU and intubated. The immediate vital signs were BP: 36/18, PR: 150, RR: 32, and T: 37.1. A Few minutes later, the patient developed ventricular tachycardia suddenly, and CPR began immediately by performing D/C shock, and epinephrine, atropine, and HCO₃ were injected which took 10 minutes and was generally successful. Due to anuria, the patient got a Lasix ampoule and in the vaginal examination, the cervix was closed, and also FHR was detectable.

After a few hours, she aroused another cardiac arrest and despite a 45-minute CPR with the same protocol, unfortunately the patient expired. Anaphylactic shock due to cyst rupture or drainage is supposed to be the reason of death.

Hydatid cysts are rare during pregnancy, occurring in 1/20,000 to 1/30,000 pregnancies, but they can be hazardous for both the mother and the fetus [1]. Systemic drug therapy, surgery, and percutaneous treatment [PAIR] can be considered as treatments [2]. Due to the absence of peritonitis and the multiloculated cysts, we performed PAIR in our patient.

Cyst rupture is a dangerous complication of hydatid disease in pregnancy, which can be fatal for the mother and the fetus due to anaphylaxis [3]. Information on the management, consequences, and follow-up of hydatid cyst illness during pregnancy is quite limited. However, if the hydatid cyst ruptures during the procedure, further treatment with albendazole should be performed [2].

References

1. Junghanss T, da Silva AM, Horton J, Chiodini PL, Brunetti E, et al. Clinical management of cystic echinococcosis: State of the art, problems, and perspectives. *Am J Trop Med Hyg.* 2008; 79: 301-311.
2. Akbaş A, Daşiran F, Dagmura H, Daldal E, Özsoy Z, Okan I, et al. Primary hydatid cyst localized in soft tissue during pregnancy. *J Surg Case Rep.* 2019; 2019: Rjy324.
3. Çankaya BY, Yeşilyurt M. Giant hydatid cysts in pregnancy: A rare presentation. *Rev Soc Bras Med Trop.* 2021; 54.