

Photoclinic

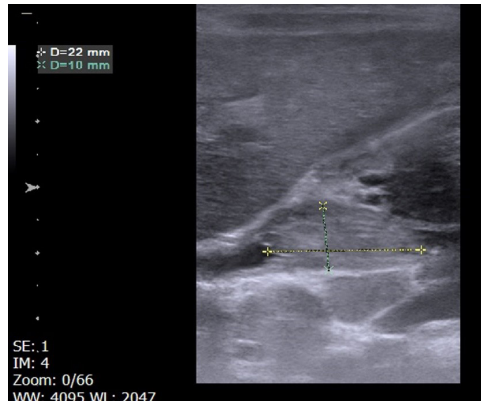


Figure 1. Abdominal sonography revealed a dilated CBD containing a leaf-like structure in the lumen measuring 22×10 mm. CBD, common bile duct.



Figure 3. Leaf-like flukes measured 2.2 cm in greatest diameter and had cone shaped anterior ends with prominent suckers.

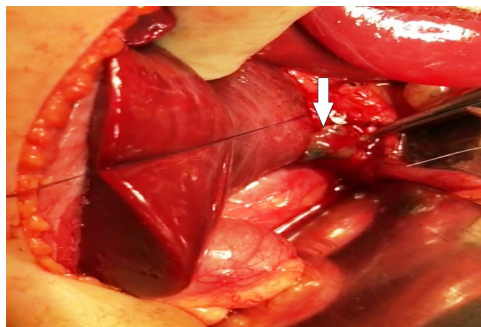


Figure 2. Intraoperative exploration and incision of the middle part of CBD revealed flukes (arrow). CBD, common bile duct.

The patient was a 5-year-old boy with malaise, abdominal discomfort, intermittent fever and vomiting since two years ago. Complete blood count was relatively normal except for mild eosinophilia

(white blood cells = $8.05 \times 10^6/L$, hemoglobin = 116 g/L, platelet = $464 \times 10^6/L$, neutrophil = 42.8%, lymphocyte = 43%, monocyte = 8.1%, eosinophil = 5.7%, basophil = 0.4%). Liver function tests were also in normal limits. Abdominal sonography revealed prominent intrahepatic bile ducts and a dilated common bile duct (CBD) containing a movable leaf-like structure in the middle part measuring 22×10 mm (Figure 1). CBD mural thickness was also increased which could be suggestive of cholangitis. Subsequently, the patient underwent CBD exploration after Kocher incision and the dilated CBD (13 millimeter in diameter) was observed. Cholecystectomy was performed, CBD was incised anteriorly and three flukes were removed by the surgeon (Figures 2 and 3). Finally, the patient was treated with anthelmintic drug and was discharged. He was well and had no symptoms during the 3-month follow-up after treatment.

**What is your diagnosis?
See the next page for your diagnosis.**

Received: January 18, 2020, Accepted: February 18, 2020, ePublished: June 1, 2020

Bahar Ashjaei, MD¹; Fatemeh Farahmand, MD²; Mohammad Vasei, MD³; Fatemeh Zamani, MD⁴; Mohammad Taghi Haghi Ashtiani, MD³; Alireza Moradzadeh, MD²; Moeinadin Safavi, MD³

¹Pediatric Surgery Department, Children Medical Center, Tehran University of Medical Sciences, Tehran, Iran

²Pediatrics Gastroenterology Department, Children Medical Center, Tehran University of Medical Sciences, Tehran, Iran

³Pathology Department, Children Medical Center, Tehran University of Medical Sciences, Tehran, Iran

⁴Radiology Department, Children Medical Center, Tehran University of Medical Sciences, Tehran, Iran

*Corresponding Authors: Moeinadin Safavi, MD; Children's Medical Center, Tehran University of Medical Sciences, Tehran, Iran.

Tel: +98-2161472405. Emails: moein.safavi@gmail.com, msafavi@sina.tums.ac.ir

Cite this article as: Ashjaei B, Farahmand F, Vasei M, Zamani F, Haghi Ashtiani MT, Moradzadeh A. Photoclinic. Arch Iran Med. 2020;23(6):412-413. doi:10.34172/aim.2020.36.

■ Photoclinic Diagnosis***Fasciola hepatica* in Biliary Tree*****Fasciola hepatica* in Biliary Tree**

Fascioliasis is a zoonotic parasitic infestation by liver trematodes *Fasciola hepatica* and *Fasciola gigantica*. This disease is endemic in the Middle East, Far East, Eastern Europe and Latin America. Indigenous people and farmers who feed aquatic plants like water-cress are at risk of infestation. Ingestion of *Fasciola metacercariae* and its migration from the duodenum to the peritoneal cavity, penetrating the liver capsule and settling in the biliary tree occur in the acute phase of the disease. Three to four months later, the flukes grow and mature in the biliary tree and produce eggs during the chronic phase. Fascioliasis may be asymptomatic or have different presentations like biliary colic, epigastric pain, jaundice, and pruritus (due to biliary tract inflammation and obstruction and even pancreatitis).^{1,2} A single 10 mg/kg dose of triclabendazole is the treatment of choice for fascioliasis. Alternatively, another anthelmintic drug, nitazoxanide, can be used, especially in the chronic phase of the disease.

Authors' Contribution

BA: Involved in patient's surgical management and drafting the manuscript. FF and AM: Involved in patient's management and drafting the manuscript. MV, MS and MTHA: Involved in pathology interpretation, image preparation and drafting the manuscript. FZ: Involved in radiology interpretation and reviewing the manuscript.

Conflict of Interest Disclosures

The authors have no conflicts of interest.

Ethical Statement

Informed consent was obtained from the patient's parents.

Funding Sources

None.

References

1. Martins A, Gonçalves Á, Almeida T, Lopes L, Midões A. *Fasciola hepatica*—a “Diver” in the Biliary Tree. *J Gastrointest Surg.* 2017;21(11):1959-60. doi: 10.1007/s11605-017-3477-z.
2. Sah R, Khadka S, Khadka M, Gurubacharya D, Sherchand JB, Parajuli K, et al. Human fascioliasis by *Fasciola hepatica*: the first case report in Nepal. *BMC Res Notes.* 2017;10(1):439. doi: 10.1186/s13104-017-2761-z.



© 2020 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.