

Fascioliasis: A Rare Case Mimicking Cholelithiasis

Arda Işık,¹ İlyas Sayar,² Barış Gülhan,³ Deniz Fırat¹

¹Department of General Surgery,
Erzincan University Faculty of
Medicine, Erzincan, Turkey

²Department of Pathology,
Erzincan University Faculty of
Medicine, Erzincan, Turkey

³Department of Microbiology,
Erzincan University Faculty of
Medicine, Erzincan, Turkey

Submitted: 09.10.2015
Accepted: 03.12.2015

Correspondence: Arda Işık,
Erzincan Üniversitesi Tıp Fakültesi
Genel Cerrahi Anabilim Dalı,
Erzincan, Turkey
E-mail: kararda@yahoo.com



Keywords: Cholelithiasis;
eosinophilia; Fasciola hepatica.

ABSTRACT

Fascioliasis is a zoonotic disease that is very rarely seen in human beings. Histopathological examination of surgical specimen of a 43-year-old male patient who underwent surgery for cholelithiasis revealed the presence of *Fasciola hepatica*. Fascioliasis has liver (acute) and biliary (chronic) phases. Peripheral eosinophilia is dominant during liver phase; signs of cholelithiasis are dominant in biliary phase.

INTRODUCTION

Fascioliasis is a zoonotic disease very rarely seen in human beings. It generally leads to infection in cattle and sheep, but this parasite can also infect human beings coincidentally. Aquatic plants and vegetables such as grasses, watercress, and water mint are sources of metacercariae. Mammals can acquire the infectious agent *Fasciola hepatica* through ingestion of contaminated water or vegetation. [1,2] Detection of the parasite, which eventually settles in the biliary tract, can be made by observing eggs in stool. In this article, a case of fascioliasis that was discovered in a patient who was operated on with presumptive indication of cholelithiasis is presented. Histopathological examination of a surgical specimen revealed the presence of parasites and provided diagnosis of fascioliasis.

CASE REPORT

A 43-year-old male patient was evaluated in the surgical clinic for dyspepsia with a history of nearly 1 year. Without any antecedent comorbidity, ultrasonographic diagnosis of the patient was cholelithiasis, necessitating cholecystectomy. Histopathological evaluation of gallbladder detected presence of *Fasciola hepatica* (Figure 1). Postoperative immunological evaluation revealed positive indirect hemagglutination test result. Postoperative microbiological examination of feces disclosed encapsulated eggs of the parasite. Patient received triclabendazole treatment during postoperative period, and no comorbidities were encountered during follow-up visits. Informed consent was taken from the patient.

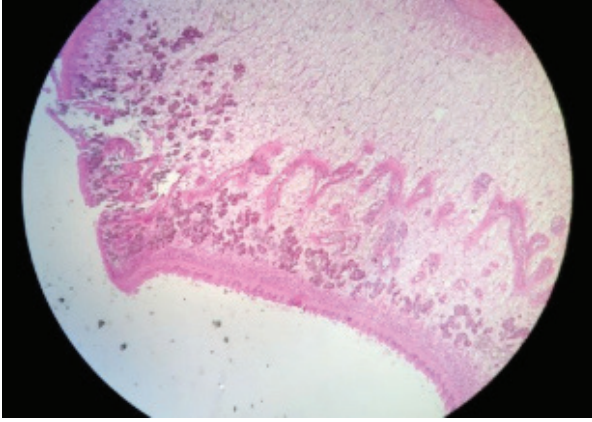


Figure 1. Fasciola hepatica.

DISCUSSION

Fasciola hepatica has hepatic (acute), and biliary (chronic) phases. Manifestations of cholelithiasis are marked during the biliary phase, and cure can be achieved with cholecystectomy and anthelmintic treatment.^[2] Many infections caused by this parasite are asymptomatic. Manifestations of acute disease occur when parasite traumatizes parenchyma of the liver to reach biliary tract. Presence of parasite leads to proliferation of the ductal epithelium, inflammation, and fibrosis. Severe infection may lead to cholestasis, hepatic atrophy, and cirrhosis. However, in chronic phase of infection, biliary colic and cholangitis are detected. Fasciola species are refractory to praziquantel therapy, and triclabendazole should be preferred.^[3-5] In the present case, triclabendazole treatment was administered, and no complications were observed. In Turkey this parasite is endemic;

however, it is rarely seen in cases with cholelithiasis. Occasionally it can be seen in the gastrointestinal system, and particularly the colon. In such a case, colon cancers should be kept in mind in the differential diagnosis.^[6,7] The present case indicates that infestation of Fasciola hepatica should be considered for patients diagnosed as cholelithiasis.

REFERENCES

1. Cwiklinski K, Allen K, LaCourse J, Williams DJ, Paterson S, Hodgkinson JE. Characterisation of a novel panel of polymorphic microsatellite loci for the liver fluke, Fasciola hepatica, using a next generation sequencing approach. *Infect Genet Evol* 2015;32:298–304.
2. Mas-Coma MS, Esteban JG, Bargues MD. Epidemiology of human fascioliasis: a review and proposed new classification. *Bull World Health Organ* 1999;77:340–6.
3. Alvarez-Mercado JM, Ibarra-Velarde E, Alonso-Díaz MÁ, Vera-Montenegro Y, Avila-Acevedo JG, García-Bores AM. In vitro anti-helmintic effect of fifteen tropical plant extracts on excysted flukes of Fasciola hepatica. *BMC Vet Res* 2015;11:45.
4. Acha PN, Szyfres B. Zoonoses and Communicable Diseases Common to Man and Animals. Pan American Health Organisation, Washington DC. 2003.
5. Keiser J, Utzinger J. Chemotherapy for major food-borne trematodes: a review. *Expert Opin Pharmacother* 2004;5:1711–26.
6. İnce V, Ara C, Koç C, Ersan V, Barut B. Fasciola hepatica Mimicking Malignancy of the Liver and Colon: Three Case Reports. *İnönü Üniversitesi Tıp Fakültesi Dergisi* 2010;17:207–10.
7. Isık A, Eken H, Demiryılmaz I, Yılmaz I, Fırat D, Cimen O. Rectal Lymphoma. *Turkish Colon Rectum Surgery Journal* 2015;25:106–8.

This case report was presented as a poster at the 12th National Congress of Hepatopancreatobiliary (April 1–4, 2014, Antalya).

Fasiyolilyaz: Kolelitiyazisi Taklit Eden Nadir Bir Olgu

Fasiyolilyaz insanlarda çok nadir gözlenen zoonotik bir hastalıktır. Kırk üç yaşında kolelitiyazisi tanısıyla ameliyat edilen erkek hastanın safra kesesi patolojik değerlendirmesinde fasciola hepatica tespit edildi. Fasciola hepatica'nın, karaciğer (akut) ve biliyer (kronik) fazları bulunmaktadır. Karaciğer fazında periferik eozinofili hakimdir. Biliyer fazda kolelitiyazisi bulguları hakimdir.

Anahtar Sözcükler: Kolelitiyazisi; eozinofili; Fasciola hepatica.