



# A Clinical Presentation of a Very Rare Infection: Parenchymal *Fasciola Hepatica*

Nadir Bir Enfeksiyonun Çok Nadir Bir Klinik Prezantasyonu: Parankimal *Fasciola hepatica*

Ferdane Sapmaz<sup>1</sup>, İsmail Hakkı Kalkan<sup>2</sup>, Sefa Guliter<sup>1</sup>, Adem Nazlıoğlu<sup>3</sup>

<sup>1</sup>Department of Gastroenterology, Kırıkkale University of Medicine, Kırıkkale, Turkey

<sup>2</sup>Department of Gastroenterology, Kırıkkale Higher Education Hospital, Kırıkkale, Turkey

<sup>3</sup>Department of Radyology, Kırıkkale University of Medicine, Kırıkkale, Turkey

## ABSTRACT

Fascioliasis is primarily an infection of livestock such as cattle and sheep, caused by the flat, brown liver fluke *Fasciola hepatica*. Humans are accidental hosts. The diagnosis of infection depends on suspicion. Radiologic findings are specific. Usually, Computed Tomography (CT) and other imaging studies show hypodense migratory lesions of the liver. The development of a chronic liver abscess appears to be extremely rare. Here we present our case with hepatic abscess due to *F. hepatica*, which is a rare clinical presentation.

(*Türkiye Parazitoloji Dergisi* 2013; 37: 305-6)

**Key Words:** *Fasciola hepatica*, parankimal, rare

**Received:** 03.12.2012

**Accepted:** 14.04.2013

## ÖZET

Fascioliazis düz, kahverengi bir karaciğer paraziti olan *Fasciola hepatica*'un sebep olduğu, öncelikle sığır, koyun gibi çiftlik hayvanlarında görülen bir enfeksiyon hastalığıdır. Enfeksiyonun tanısı hastalıktan şüphe etmekle mümkündür. Radyolojik bulgular oldukça spesifiktir. Genellikle Bilgisayarlı Tomografi (BT) ve diğer görüntüleme yöntemleri karaciğerde hipodens, hareketli lezyonlar göstermektedir. Parankimal *F. hepatica* çok nadir izlenmektedir. Biz burada *F. Hepatica*'nın çok nadir bir klinik prezantasyonu olan parankimal *F. hepatica*'lı bir vakayı sunmayı amaçladık. (*Türkiye Parazitoloji Dergisi* 2013; 37: 305-6)

**Anahtar Sözcükler:** *Fasciola hepatica*, parankimal, nadir

**Geliş Tarihi:** 03.12.2012

**Kabul Tarihi:** 14.04.2013

## TO THE EDITOR

Fascioliasis is primarily a disease of herbivorous animals such as sheep and cattle and is a zoonotic infection caused by the trematode *Fasciola hepatica* (liver fluke). Humans become accidental hosts through ingesting uncooked aquatic plants such as watercress. The infection has two different phases; hepatic and biliary. The biliary phase usually presents with intermittent right upper quadrant pain, with or without cholangitis or cholestasis. The development of a chronic liver abscess appears to be extremely rare. Here, we present our case with hepatic abscess due to *F. hepatica*, which is a rare clinical presentation.

A 38 year old female patient was admitted to our outpatient clinic with complaints of abdominal pain in the previous two months. Her history was unremarkable for travelling, animal husbandry, hunting, drugs and agriculture, but she had a history of watercress intake. She was the only member in her family who had these symptoms or a history of watercress intake. Her physical examination was normal. Her laboratory tests were as follows: leukocytes 8100/mm<sup>3</sup>, eosinophils 4050/mm<sup>3</sup> (49%), platelets 296000/mm<sup>3</sup>, hemoglobin 11.8 g/dL, hematocrit %39.2, C-Reactive Protein (CRP) 25 mg/dL. Peripheral blood smear revealed eosinophilia as high as

**Address for Correspondence / Yazışma Adresi:** Dr. Ferdane Sapmaz, Department of Gastroenterology, Faculty of Medicine, Kırıkkale University, Kırıkkale, Turkey. Phone: +90 318 224 25 98 E-mail: ferda-sapmaz@hotmail.com

doi:10.5152/tpd.2013.2998



**Figure 1.** Liver abscesses in fasciola

48% Of the white blood cells. Her serology was negative for hepatotropic viruses, and also Rose-Bengal, Wright agglutination, and Grubel-Widal tests were negative.

A CT scan showed multiple hepatic subcapsular hypodense lesions. According to the watercress intake history, eosinophilia and CT findings, *F. hepatica* indirect hemagglutination (IHA) test was performed and it was positive at a titer of 1/640 (Figure 1). The patient was treated with Triclabendazole 10 mg/kg/day once orally for two days after informed consent had been obtained. A follow-up abdominal ultrasonography in the third month of the treatment showed a marked decrease in the size of the lesions and revealed fibrotic sequelae secondary to inflammation.

*F. hepatica* infection has two different phases; hepatic and biliary. The flukes develop for 6-8 weeks in the hepatic phase. The

patient is often asymptomatic in the hepatic phase. Abdominal pain, fever, urticaria are the common signs. The biliary phase usually presents with intermittent right upper quadrant pain, with or without cholangitis or cholestasis (1, 2).

The diagnosis of infection depends on suspicion. Radiologic findings are specific. Usually CT and other imaging studies show hypodense migratory lesions of the liver or subcapsular low attenuation regions in the liver (3, 4). The development of a chronic liver abscess appears to be extremely rare. Serologic tests and stool examination may help in confirmation of the diagnosis.

Triclabendazole and bithionol are effective agents for the treatment of fascioliasis.

In conclusion, the diagnosis of Fascioliasis, especially during the hepatic phase, is very difficult. The physicians in endemic areas particularly should be aware of the possibility of this infestation in patients who have fever, elevated liver enzymes, abdominal pain with eosinophilia and history of intake of watercress.

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