A case of cholestasis caused by Fasciola hepatica diagnosed with endosonography: “Sometimes seeing might not be enough, watching is required”

Endosonography ile tanı konulan Fasciola hepatika’nın neden olduğu kolestaz vakası: ‘Bazen görmek yeterli olmayabilir, izlemek gerekir’

INTRODUCTION

Fasciolosis is a zoonotic infection that affects approximately 50 million people and poses a risk for 180 million people throughout the world, thus constituting an important global public health issue (1). Although ruminants such as sheep, goat, and buffalo are the definite hosts for *Fasciola hepatica* (*F. hepatica*), human beings coincidentally become hosts due to the consumption of water or raw vegetables contaminated with metacercaria (2). Migration of larvae from the bowel to the liver and biliary tracts in humans leads to acute and chronic stages of the disease. During these stages, patients with findings of fever with an unknown etiology, biliary colic and cholangitis, and concomitant eosinophilia should be primarily suspected in the clinical assessment for the diagnosis of the disease. In patients suspected to have fasciolosis, the diagnosis is established later on based on the existence of eggs in stool, positive serology in serum and stool samples, and the findings of the imaging methods (3,4).

However, her epigastric pain and pain in the right upper quadrant became particularly severe in recent months along with the development of yellow eyes, due to which she visited the emergency polyclinic. Physical examination performed in the polyclinic revealed good general condition, as she was conscious, cooperative, and oriented. However, her skin and sclerae revealed symptoms of icterus. Furthermore, the patient was normotensive and showed grade 2/6 systolic murmurs in all foci in her cardiac examination. Her body temperature was 37.6°C, and there were no pathological findings in the evaluation of her respiratory system. Abdominal examination revealed sensitivity upon palpation in the right upper quadrant and the epigastric area. Laboratory analyses of her complete blood count showed the following results: white blood cells 13,800 mm³, neutrophils 13,100 mm³, eosinophils 100 mm³, and platelets 189,000 mm³. Blood biochemistry demonstrated the following values: alkaline phosphatase (ALP) 105 U/L, aspartate aminotransferase (AST) 93.8 U/L, gamma-glutamyl transpeptidase (GGT) 71.9 U/L, total bilirubin 2.42 mg/dL, direct bilirubin 1.77 mg/dL, amylase 182 U/L, lipase 201 U/L, and C-reactive protein (CRP) 67.48 mg/L. In her abdominal ultrasonography, the thickness of the gallbladder wall was found to be normal, and a hyperechogenic lesion consistent with a gallbladder polyp of diameter 3 mm was observed inside the lumen. A linear hyperechogenic area was observed in the gallbladder in the USG performed during that period.

CASE REPORT

A 28-year-old female patient visited the emergency polyclinic with complaints of weakness, yellow eyes, and abdominal pain. The patient already had weakness for approximately 1 year and had received treatment for iron deficiency anemia. She has had intermittent complaints of abdominal pain for 1 year, and calculi measuring 3–4 mm in size were observed in her gallbladder in the USG performed during that period.

Keywords: Endosonography, fasciolosis, cholestasis

The most important causative factor of fasciolosis, one of the parasitic diseases of the liver, is the trematode *Fasciola hepatica*. Although ultrasonography and magnetic resonance imaging are the primarily preferred imaging methods for the diagnosis of *Fasciola hepatica* infection, which can be observed under different clinical conditions, endosonography can be used to address the diagnostic difficulties experienced with these methods. We describe a case of a patient with cholestasis caused by *Fasciola hepatica* that was diagnosed by endosonography.

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Fasciola hepatica was administered to the patient as treatment, and the same dose was repeated after 24 hours. The patient’s complaints regressed during the follow-up period.

DISCUSSION

Fasciolosis, one of the parasitic diseases of the liver, is caused by the trematodes *F. hepatica* and *F. gigantica* (5). Human beings are a coincidental host for *F. hepatica* and are infected with metacercariae due to the consumption of contaminated water and food. The metacercariae lose their capsules, pass through the intestine wall and reach the abdominal cavity, and then penetrate the liver capsule and settle in the biliary tract. The acute and chronic stages of the disease are manifested by the changes that are observed during this migration of *F. hepatica* from the intestines to the liver and biliary tracts in the human body (5). Ultrasonography (USG), MRCP, and MRCH.
ERCP are important for the diagnosis of the disease during the chronic stage, i.e., the biliary phase of the disease. The most recently published research states that EUS contributes to the diagnosis, particularly in the case of biliary fasciolosis. Moreover, among the abovementioned imaging techniques, EUS enables monitoring by providing continuity beyond recording only sectional imaging, and therefore, it is superior to the other imaging techniques in the diagnosis of dynamic processes such as parasitic infections. In the diagnosis of fasciolosis, the disease should be suspected first in patients residing in endemic regions, after which appropriate imaging techniques should be applied.

REFERENCES