



Emerging Cases of Fascioliasis in Lorestan Province, Western Iran: Case Series Report

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Abstract

Fascioliasis is a zoonotic disease caused by *Fasciola* spp. We report five serologically and molecularly confirmed cases in an emerging region in Iran. A retrospective, case series study, performed in Lorestan Province, west of Iran between January 2015 and June 2016. From 1256 patients examined, 16 patients had positive serum ELISA. Five cases were approved as infected with fasciolosis using stool exam and PCR. Age ranged from 24 to 80 yr with mean age of 45 years. All of patients were adults and four of them had abdominal and back pain. Other symptoms included fever and chills, coughing and sore throat, weight loss, cutaneous manifestations. All patients lived in the rural environment, and four reported the ingestion of raw aquatic plants such as watercress. In fecal examination for fluke eggs, four samples were positive for *F. hepatica* eggs. Conventional PCR analysis showed that five human stools were positive for *F. hepatica*. All of 5 patients were treated with the usual dose of triclabendazole. A history of recent consumption of raw aquatic plants (in 4 out of 5 patients) is an important finding, but in one patient the source of infection remained unclear. Lorestan should be considered as an emerging region for this disease and further research in this province should be carried out.

Keywords: *Fasciola hepatica*; Parasites; Case report; Iran

Introduction

Fascioliasis is a zoonotic helminthic disease that caused by the *Fasciola* spp. It generally infects cattle, sheep, goats, and other domestic ruminants as a definitive host. Humans in the life cycle of this parasite are incidental hosts (1). Animals and humans usually are infected via consumption of

raw aquatic plants such as watercress, water caltrops or water contaminated with metacercariae. Then the larva excysted and penetrate through the gut wall into the abdominal cavity and migrate toward the liver and bile ducts and causing biliary fibrosis or obstruction and dilatation (1, 2).

