Liver involvement in visceral larva migrans
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ABSTRACT

Toxocara canis is one of the most widespread zoonotic parasitic infections. Human infection occurs by the accidental ingestion of embryonated eggs or larvae. The present case highlights hepatic toxocariasis in an immunocompetent host which presented as fever and jaundice. The infection resolved with appropriate treatment.

Introduction

Toxocariasis, caused by infection with larvae of Toxocara canis, manifests in humans in a range of clinical syndromes like: visceral and ocular larva migrans, neurotoxocariasis and covert or common toxocariasis. Toxocara canis is one of the most widespread zoonotic parasitic infections humans share with dogs, cats and wild canids, particularly foxes. Human infection occurs by the accidental ingestion of embryonated eggs or larvae. Most infections are asymptomatic. Clinically overt infections are difficult to diagnose as serological confirmatory tests are expensive and not easily available.¹

The present case highlights hepatic toxocariasis in an immunocompetent host which resolved with treatment.

Case report

A 32 year old male presented with high grade fever with chills and rigors, right upper abdominal pain, and yellowish discoloration of eyes for one week. He had two pet dogs and one cat. Ultrasound of the abdomen showed hepatomegaly with multiple hypoechoic lesions in both lobes of liver. Amoebic serology, hydatid serology, HIV serology and blood cultures were negative. Computed tomography scan (Panel a) and magnetic resonance imaging (Panel b) showed multiple conglomerated complex ovoid lesions (2-8cms) in both lobes of liver. In view of clinical history, liver biopsy showing eosinophilic granulomas and elevated Ig E levels (975 IU/ml), possibility of hepatic toxocariasis was considered. The patient was treated with albendazole 400 mg twice a day for 5 days. He responded clinically and had resolution of lesions within 4 weeks. (Panel C)

Discussion

Toxocariasis results in eosinophilic inflammation causing eosinophilic abscess or granuloma in the liver and lungs. Due to migratory nature of the lesions, the disease is called as visceral larva migrans. Toxocariasis of the liver presents as multiple liver lesions that are usually mistaken for other conditions² On imaging, hepatic lesions are seen as multiple, ill-defined, oval lesions that measure 1.0-1.5 cm in diameter and are best appreciated in the portal venous phase of contrast-enhanced CT and MR imaging. Differential diagnoses include liver metastasis, hepatocellular carcinoma and granulomatosis of the liver³. In the absence of risk factors like geophagia, pet dogs etc and atypical presentations, liver needle biopsy and histological examination could be necessary⁴.

REFERENCES