

Severe Eosinophilia and Hepatic Lesion: a Rare Case of Fascioliasis from Greece

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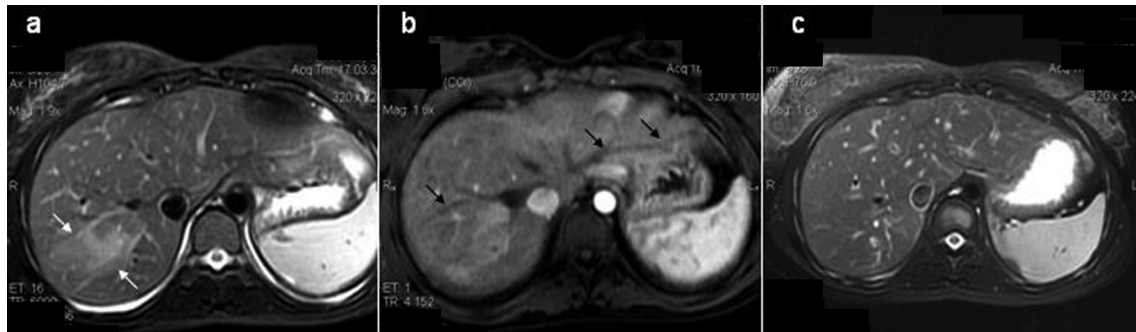


Fig 1. Patient's initial MRI showed a poorly defined heterogeneous area (white arrows) in hepatic segment VII, which presented with high signal intensity on T2 weighted imaging (a). MRI imaging: the most characteristic finding was serpiginous tract lesions (black arrows), beginning from liver capsule and continuing to more central areas of the hepatic parenchyma, which were not enhanced after intravenous contrast media injection, in contrast to their surrounding parenchyma (b). Four months after triclabendazole administration, follow up MRI showed almost complete resolution of the pathological area in the hepatic segment VII (c).

A 17-year-old gipsy female with an unremarkable past medical history was referred to our hospital because of episodic pain in the right upper quadrant of the abdomen over the last four days. Her initial evaluation revealed a 5-cm diameter hypodense lesion in the right hepatic lobe on abdominal sonography and severe peripheral blood eosinophilia ($10.83 \times 10^9/L$). The patient's history was negative for recent drug use, allergies or atopy, but she recalled recent close contact with a "sick" sheep.

Repeated examinations of stool specimens and duodenojejunal fluid aspiration were negative for the ova and parasites. Blood, urine and stool cultures, virological serology and antibodies against *Leishmania donovani*, *Toxocara canis*, *Toxoplasma gondii* and *Echinococcus granulosus* were also negative. A full immunological profile, IgE levels and serum tumor markers were unrevealing. A whole body CT scan showed only a hypodense lesion in the right liver lobe of 5-cm-diameter. Bone marrow molecular, cytogenetic and immunophenotypic studies provided no evidence of myeloproliferative disease.

Liver MRI showed a poorly defined heterogeneous area in the segment VII and characteristic serpiginous track lesions, highly suggestive of acute fascioliasis (Fig. 1) [1-3]. The subcapsular hypodense pathological area was compatible with a traumatic lesion due to worm migration from the liver capsule to the more centrally located ductules, whilst the serpiginous track lesions corresponded to the tunnel that

the worm left behind during its route from the liver capsule to the bile ductules. Based on the MRI findings and the history of close contact with a sick sheep (definite host of *Fasciola Hepatica*), we decided to administer a single dose of 10 mg/kg triclabendazole, a highly effective and specific regimen against fascioliasis [1]. The eosinophil count started to fall within one week and normalized after eight weeks, whilst the hepatic lesion was almost completely resolved at four months, confirming our clinical diagnosis.

The diagnosis of acute fascioliasis depends on the combination of clinical and radiological findings, supported by serology. However, in non-endemic areas, unfamiliarity with the disease, unavailability of the specific serological test and the absence of fasciola eggs in stools during the acute phase make the diagnosis very difficult. The presence of characteristic liver MRI findings of acute fascioliasis may guide the diagnostic approach [2, 3]. In cases of high clinical suspicion and unavailability of the specific serologic test, therapeutic response to triclabendazole is so reliable that it can be used as a diagnostic criterion [1].

References

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