

Neglected Human Fascioliasis Case in a Visceral Leishmaniasis Endemic Area, North-Western Iran

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Abstracts

Ardabil Province, northwestern Iran, is endemic for visceral leishmaniasis of Mediterranean type from many years ago. This situation might cause to underestimate other important diseases, which occur sporadically within the same area. In this case, a 6-year-old male patient in this area was treated as infected with visceral leishmaniasis initially with seropositive result for visceral leishmaniasis. Afterwards, histopathological study of crashed material and tissue sections surprisingly revealed numerous liver fasciolid fluke eggs. This case demonstrates that in an area endemic for a given parasitoses, other important infectious diseases must be considered as well.

Many parts of Ardabil Province, are endemic for visceral leishmaniasis of Mediterranean type (1). Both health care system and local physicians have been familiar with the disease during the last two decades. This situation might underestimate other diseases that occur sporadically within the same area. Clinicians in other areas with similar situations, habitually, are not concerned enough to check for many other less commonly observed infections. Since the clinical manifestations of different parasitic diseases may be partly similar, but different approaches needed to be followed for treatment of each, therefore, proper diagnosis is imperative to avoid preventable complications.

A 6 yr old male patient was admitted to a medical center in Meshkin Shahr, county, with seropositive result for visceral leishmaniasis. A common treatment course was administered.

This treatment was not completely effective in this case. Persistent gastrointestinal bleeding, few degrees of fever, and loss of appetite forced the

patient to seek further treatment. During the follow up, eye whites gradually turned yellow, and other symptoms showed up. Eventually, these symptoms persuaded the surgeons to perform hepatectomy for the patient.

Curiously, days after surgery, pieces of patient's liver were investigated in laboratory of helminthology (Fig. 1) and tissue sections, surprisingly, revealed numerous liver fasciolid fluke eggs, diagnosed using authentic clues (2). It worth mentioning that, the internal components of the collapsed eggs were not obvious, when infected tissues were sectioned and stained by hematoxylin and eosin (3). Broken shells were the only signs of eggs residual in the core of the granuloma (Fig. 2).

Human fascioliasis has repeatedly been highlighted in Iran after emerging two outbreaks in northern parts of Iran especially in Guilan Province, northern Iran (4), but has never been considered as a public health issue in Ardabil Prov-

ince. This observation will drag the mind of clinicians from the more complicated disorders to the simplest means of parasitological examination on the early steps of patient analysis. Logic of this approach is highly determinative, mainly in the rural areas where the knowledge about potential parasitic diseases is still restricted and/or mixed infections can occur.

In conclusion, the excessive attentiveness on a certain prevalent disease in a given endemic area can be the cause of neglect of other possible etiological agents during the course of diagnostic algorithm in the clinics. Therefore, local physicians and other health workers should be kept alert of geographical distribution of different pathological agents as well as the parasites in their territory.

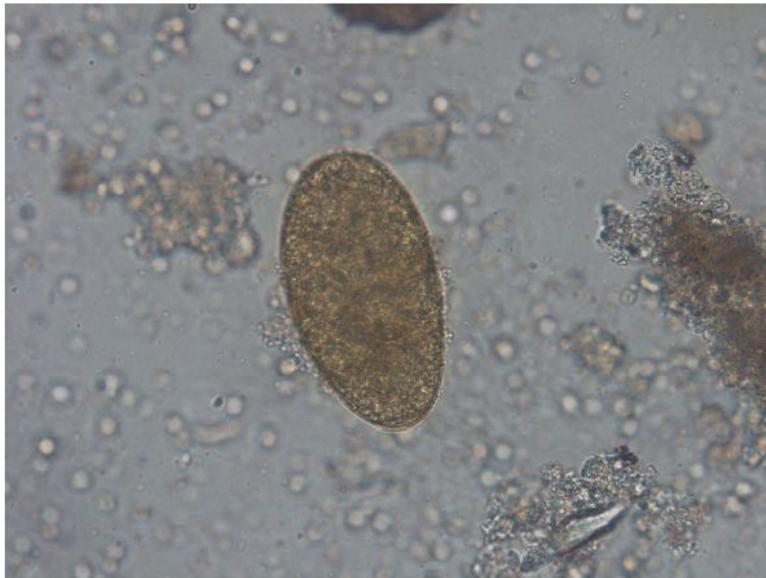


Fig. 1: Crashed material of liver under light microscope shows the liver fasciolid fluke eggs (40 X)

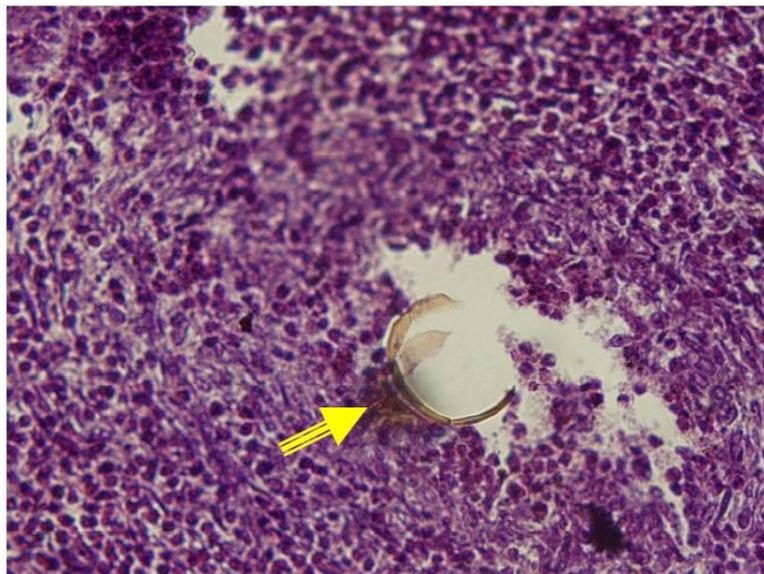


Fig. 2: Tissue section stained with hematoxylin and eosin demonstrates a shell of liver fasciolid fluke egg (100 X)

Ethical considerations

Ethical issues (Including plagiarism, Informed Consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc) have been completely observed by the authors.

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