

Fasciola Hepatica

Presentation of a Case, and a Brief of The Clinical Manifestations

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Özet: Makalemizde halsizlik, hepatomegali ve eozinofili ile başvuran bir hasta anlatılmaktadır. Bu vakada öncelikle eozinofili sebepleri araştırılmış ve reroloji ile "fascioliasisi" tanısı konmuştur. Bu vaka şunu öğretmiştir: Özellikle koyun-sığır beslenen ve pişmemiş su bitkileri yenilen bölgelerden gelen ve eozinofili ile başvuran hastalarda akla ilk gelmesi gereken hastalıklardan birisi de "fascioliasis" olmalıdır.

Summary: FASCIOLA HEPATICA: Presentation of a case, and a brief of the clinical manifestations:

We report on a patient who presented with malaise, hepatomegaly and eosinophilia. All the common causes eosinophilia were first ruled out and using serological tests the diagnosis of fascioliasis was made. What we suggest is that, raw water-plant ingestion, in sheep-cattle raising areas, is a major risk factor for fasciola hepatica infection and the primary disease entity to be considered in such at-risk personnel, especially if presenting with eosinophilia, should be fascioliasis.

Anahtar Kelimeler: Fasciola hepatica, seroloji praziquantel.

Key Words: Fasciola hepatica, serology, praziquantel.

Our patient was a 38 year-old male teacher, who had presented with complaints of dry cough, hoarse voice, malaise and subfebrile fever. His body temperature was around 37.5 degrees celsius (oral), there were coarse rales in the basal zones of the lungs, the liver was palpable 4cm below the costal margin on the midclavicular line, it was soft in consistency, with a smooth margin and its total vertical length was 13cm.

As for the laboratory studies, the total white blood cell count was 26500, the peripheral blood smear showed 73% mature eosinophiles, and the erythrocyte sedimentation rate was 88 cm/hr. The liver function tests revealed slightly abnormal enzyme levels. (ALT: 106 AST: 64 i.u) Alkaline phosphatase level was 411 units, 98% of which was of liver origin. The serum protein electrophoresis revealed a diffuse increase in the gamma globulins and the abdominal ultrasonography showed minimal heterogeneity in the echo pattern of the right hepatic lobe. Six samples of

fresh stools (each on a different day) Were examined for parasite eggs, and the results were all negative. In the bone marrow aspiration sample, there were 10% eosinophilic myelocytes, and 22% eosinophilic granulocytes. In the liver biopsy we could see eosinophilic infiltrates and nothing else. Finally, the serological evaluation of his blood revealed fasciola hepatica infection.

After proving the infection, we treated the patient with praziquantel (75 mg/kg/day in 3 divided doses) for two days.

COMMENT

Fasciola Hepatica is a hermaphroditic fluke and is a great danger for humans world wide, who ingest raw water plants in cattle or sheep raising areas.

The immature fluke, when it enters the dodenal lumen, penetrates the mucosa to enter the abdominal cavity. Then, by an unknown route, reaches the Glisson's Capsule. Later, it enters the liver paranchyme and travels through the

liver. The fluke, still immature, produces small necrotic foci along the way. Finally it reaches the biliary canals and causes hyperplasia. The result is biliary obstruction and cholecystitis. The signs and symptoms may include abdominal pain, hepatomegaly, urticaria, jaundice, fever, diarrhea, weight loss, and anemia (though the patient may be totally asymptomatic for months). Later on, biliary cirrhosis and in many cases, cholelithiasis may be added to the picture. The relation with biliary tract carcinomas is not certain but possible.

To diagnose fascioliasis, one must show the parasite eggs in the stool, but particularly in the acute phase, this is not possible. Many cases are

known throughout the world in which the diagnosis could be reached during surgery for biliary pathologies. Therefore, prior to the operation, it would be very appropriate to perform serological tests, to reach the correct diagnosis.

CONCLUSION

Fasciola hepatica is a fluke which may infect human beings who eat raw water plants. The clinical picture produced may be totally nonspecific. Therefore if the lab data shows eosinophilia, if there is a story of raw water plant consumption, one must carry out serological tests, to diagnose fascioliasis, before the parasite causes irreversible damage...

REFERENCES

1. Specificity of crude and purified fasciola antigens in immunodiagnosis of human fascioliasis. Khalil HM., Abdel TM., Maklad MK., Abdallah HM., Fahmy IA., El Zayyat EA., Department of Parasitology, Faculty of Medicine, Ain Shams University, Cairo: J Egypt Soc Parasitol. 1990 Jun. 20(1); 87-94.
2. Hepatobiliary Fascioliasis: noninvasive imaging findings. Van Beers B., Pringot J., Geubel A., Trigaux JP., Bigaignon G., Dooms G., Department of Radiology, St Luc University Hospital, Brussels: Radiology 1990 Mar. 173 (3 pt 1) P 809-10.
3. Paraziquantel and Fasciola Hepatica Infection. Farid Z., Kamal M., Mansour N.: Abbasia Fever Hospital, Cairo, Egypt. Trans R Soc Trop Med Hyg, 1989 Nov-Dec. 83(6). P813.
4. Biliary tract disease due to fasciola hepatica: report of a case. Rivero MA., Marcial MA: Bol Asoc Med P R. 1989 Jul. 81(7). P272-4.
5. Use of immunosorbent-purified antigens of fasciola hepatica in enzyme immunoassays. Trudgett A., Anderson A., Hanna RE. Department of Biology, Queen's UnC of Belfast, Northern Ireland: Res Vet Sci. 1988 Mar. 44(2). P272-4.