

A Case of Infection with Fasciola Hepatica with Allergic Manifestations

A. A. HANJANI* B. NIKAKHTAR* F. ARFAA**
M. KHAKPOUR** M. A. RASHED*

Introduction

The high prevalence and intensity of fascioliasis among domestic animals in Iran is a fact already established (Sabokbar, 1962; Sabbaghian et al., 1966; Sahba et al., 1971).

Reports of cases of human beings infected with the parasite have been increasing in recent years (Hanjani et al., 1968; Sohrabi et al., 1968; Moayer, 1971).

In most of these patients, the main complaint was intermittent abdominal pain, and high eosinophilia has been reported from a few cases.

This report presents the history of another case in which the main clinical symptom was an allergic manifestation.

Case History

Mr. M., a 55 year-old male merchant who had been living in Tehran for many years, was first admitted because of urticaria, which had started

* - Department of Internal Medicine, School of Medicine, Teheran University.

** - Department of Epidemiology and Pathobiology, School of Public Health, Teheran University.

— Received for publication October 1971.

2.5 months before. Attacks of urticaria occurred at intervals of not more than 2-4 days. His past history was non-contributory, as was his family history. He denied being allergic to any specific drug or food. This urticaria had recently been accompanied by attacks of bronchial asthma, which were refractory to ordinary treatment. On examination, he was found to be healthy but considerably overweight.

Laboratory data were as follows:

Urine analysis was normal. R.B.C., 4,500,000 and W.B.C., 9200 per mm³ with marked eosinophilia of 35 % of the total white blood count (400 per mm³). The blood urea nitrogen and fasting blood sugar, as well as other blood chemistry, were within normal limits, except for a moderate elevation of uric acid of 8.4 mg per 100 ml. His serum electrophoresis and his chest X-ray were normal. Stool examination revealed the presence of ova of *Fasciola hepatica* on several occasions. Skin tests performed to confirm or rule out the possible existence of other allergens were negative. A complement fixation test against *Fasciola hepatica* was carried out and proved to be strongly positive. Based upon this possible etiological factor, treatment against this worm was started with chlorochin tablets and complete relief of the urticaria as well as of the bronchial asthma attacks was achieved. Two months after the complete remission of the symptoms, several examination of the stools and duodenal aspirations were negative for ova of *Fasciola hepatica*.

Discussion

The absence of special symptoms in human fascioliasis makes clinical diagnosis difficult.

Although high eosinophilia is a constant symptom observed in most patients, allergic manifestation in the form of asthma and urticaria are not commonly reported.

Following these observations, any patients with allergic symptoms refractory to antihistaminic medication found in the endemic areas should be carefully examined for the presence of fascioliasis.

Summary

A case of infection with *Fasciola hepatica*, in which the main clinical symptoms were urticaria and asthmatic attacks, is described.

These allergic manifestations subsided after the infection had been treated.

Résumé

Un cas d'infection par *Fasciola hepatica* est décrit. Les principaux symptômes étaient l'urticaire et l'asthme. Ces manifestations allergiques ont disparu après le traitement.

References

1. Hanjani, A. A., Sadighian, A., Nikakhtar B. and Arfaa, F. (1968). The first report of human infection with *Dioctophyma renale* in Iran. *Trans. Roy. Soc. Trop. Med. and Hyg.*, 5, 647.
2. Moayer, H. (1971). Human infection with *Fasciola hepatica* and *Decrocoelium dendriticum* in Isfahan, Central Iran. *J. Parasit.*, 2, 160.
3. Sabbaghian, H., Arfaa, F. and Bijan, H. (1964). Some information on diseases caused by trematodes in Khuzestan, Iran. *J. Sch. of Vet. Med. Tehran Univ.*, 13, 8 (in Persian).
4. Sabokbar, R. D. (1960). Geographical distribution of *Fasciola hepatica* and its relation to human distomatosis. *J. Sch. Med. Tehran Univ.*, 3, 251 (in Persian).
5. Sahba, G. H., Arfaa, F., Farahmandian, I. and Jalali, H. (1971). Studies on animal fascioliasis in Khuzestan, Southwestern Iran. *J. Parasit.* (in press).
6. Sohrabi, A. K. (1965). *Human cases of distomatosis along the Caspian Sea*. Paper presented in the 3rd Veterinary Congress, Tehran (in Persian).