

Lymphadenopathy Following Enterobiasis

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Abstract

Human enterobiasis in the majority of cases is asymptomatic. Enterobiasis in this case who presented with generalized lymphadenopathy was diagnosed by exclusion of other causes and based on mother noticing worms in her child stool. Mebendazole treatment was prescribed and this was followed by returning of lymph nodes to normal size.

Introduction

Lymphadenopathy, which is defined as an abnormality in the size or character of lymph nodes, is caused by the invasion or propagation of either inflammatory cells or neoplastic cells into the node. It is a common manifestation in the pediatric age group. It results from a large variety of disorders [1], whose broad categories are easily recalled using the acronym "MIAMI," representing "Malignancies, Infections, Autoimmune disorders, Miscellaneous and unusual conditions, and Iatrogenic causes". Most patients can, however, be diagnosed on the basis of a careful history, physical examination and relevant laboratory tests. Although the majority of children have benign lymphadenopathy of unknown etiology, a small group will have serious life-threatening lymphadenopathy. Among primary care patients presenting with lymphadenopathy, the prevalence of malignancy has been estimated to be as low as 1.1% [2]. Lymphadenopathy associated with enterobiasis is not commonly reported but it can occur in case of tissue invasion. The causative agent of human enterobiasis is *Enterobius vermicularis* (the pinworm or threadworm). The disease is facilitated by overcrowding as well as inadequate personal and community hygiene. Enterobiasis, in the majority of cases is

asymptomatic and the commonest symptom is intense pruritus ani. Mebendazole and albendazole are effective treatment.

Case report

A 6 years old boy presented with abdominal pain and generalized lymphadenopathy (cervical and axillary nodes 1.5 cm and inguinal nodes 2cm, not tender, or fixed to skin). Normal vital signs and gross parameters. Normal systemic examination with no splenomegaly. Complete blood count revealed eosinophilia. Other investigations are normal. Stool examination for ova was done three times with normal results. However the mother recovers a small white worm in her child stool which was consistent with *Enterobius vermicularis*. Mebendazole 100 mg was given and the child was planned for nodal biopsy [3,4]. Seven days later there was a marked decrease in the size of nodes. Within a period of 6 months follow up, without any further treatment except mebendazole two weeks after the first dose, the lymph nodes returned to normal size.

Discussion

Enterobius vermicularis infection occurs worldwide and is especially common in children. Many local and systemic symptoms and signs have been described. The pinworm or its eggs may, however, be seen in unusual sites i.e. genitourinary tract,

peritoneum, ovaries, liver, lung and CSF [5]. A controlled study of infected children 2-12 years of age failed to document a specific syndrome due to *E.vermicularis* [6]. Eosinophilia is not a common manifestation of enterobiasis unless there is tissue invasion [5, 7, 8]. A case report showed that *E. vermicularis* is associated with small bowel gangrene and mesenteric lymphadenopathy [5]. Mebendazole is an effective drug although not the first choice. Surgery is rarely needed to treat complications [5]. Hence tissue invasion should not be overlooked when *E. vermicularis* is associated with eosinophilia.

References

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