CASE REPORT

UNILATERAL AXILLARY MASS - AN UNUSUAL PRESENTATION OF FILARIASIS

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ABSTRACT: Filariasis is a major parasitic infection, which continues to be a public health problem in India with most infections being caused by *Wuchereria bancrofti*. The area of lymphatic involvement and duration of infection usually determines the clinical presentation. It frequently presents as lymphadenopathy limited to inguinal region or as filarial lymphoedema of lower limbs. Unilateral mass is an extremely rare presentation of this condition. We report a case of filariasis presenting as axillary mass without peripheral eosinophilia, lymphadenopathy and microfilaremia.

KEY-WORDS: cystic mass, filariasis, FNAC.

INTRODUCTION: Filariasis is endemic in the tropical countries and is continues to be a major public health problem. Although the parasite damages the lymph system, most infected children are asymptomatic. Chronic lymphedema, mostly affecting the legs, hydrocele, and tropical pulmonary eosinophilia syndrome are recognized clinical features commonly seen in adults but these are less frequent in children. Chronic unexplained lymphadenopathy is common presentation in children. Axillary mass is an extremely uncommon presentation of filariasis even in endemic areas. We present here a case of axillary filarial mass; diagnosis is being established by FNAC while working up for an axillary mass lesion. Rare differential diagnosis of this uncommon entity should be kept in mind while treating a case of unilateral cystic mass so that surgery can be avoided.

CASE REPORT: A 7 year-old boy presented with a swelling in the right axilla for the last one month. History was unremarkable and there were no constitutional symptoms like fever, cough etc. There was no history of weight loss, swelling of the upper extremities or any lumps elsewhere in the body. Physical examination revealed mobile, non-tender mass measuring about 4 x 5 cm size with variable consistency (soft to firm) in the right axilla (Fig. 1 A, 1B). The boy was underweight-for-age. General examination and the system examination were unremarkable.

Laboratory examination of blood revealed Hb of 11.5 g/dl; normal WBC count (TLC- 8200/cu mm); near normal differential count (DLC: Polymorphs-58, Lymphocytes-36 and Eosinophils-6); peripheral smear showed normocytic normochromic RBCs; and ESR of 35 mm at the end of the first hour. The absolute eosinophil count was 490/cu mm. Stool examination did not reveal any parasite, ova or cyst. Chest radiography revealed no abnormality.

As clinical presentation and investigations did not give any clue to specific diagnosis, fine needle aspiration cytology (FNAC) of the axillary mass was done which showed reactive lymphoid cells with plenty of eosinophils and a coiled structure highly suspicious of microfilaria. The repeat FNAC revealed a solitary microfilarial worm of *W. bancrofti* species. (Fig. 2) The smear also showed reactive lymphoid cells and many eosinophils in the background. (Fig. 3)

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Peripheral blood smear did not reveal any microfilaria despite repeated examinations. The case was diagnosed as asymptomatic filariasis manifesting primarily as isolated axillary mass. The child was treated with Diethylcarbamazine for two weeks. Right axillary mass disappeared completely in two weeks.

DISCUSSION: India contributes about 40% of the total burden of lymphatic filariasis. (1) Lymphatic filariasis is thought to be disease of adults until recently. Studies suggest considerable prevalence in children (2) Manifestations of the acute and chronic filariasis usually occur after years of repeated exposure to infecting vectors in endemic areas. The acute phase is characterized by fever, lymphangitis, lymphadenitis, epididymo-orchitis, and funiculitis. The parasite-induced lymphatic remodelling and lymphangiogenesis may be the cause of chronic and irreversible filarial pathology. (3) Lesions usually occur due to the permanent damage to the lymph vessels. Chronic stage of filariasis is characterized by lymphadenopathy, lymphedema, hydrocele, and Elephantiasis. (4) Unexplained chronic lymphadenopathy is recognised important manifestation in children (5) lymphedema frequently seen in adults is also observed in children as young as 2yrs (6) Lymphatic filariasis presenting as isolated swelling is very rare. Only two cases presenting with axillary mass reported till now. (7) Our case is the first case in children presenting with axillary mass. The diagnosis of a filarial infection can also been made by detecting microfilariae on microscopic examination of fine needle aspirates from lymph nodes. Fine needle aspiration cytology from breast mass, thyroid mass, hydrocele fluid, pericardial fluid, pleural fluid, ascitic fluid, and cytology of cervicovaginal smears, bronchial aspirates, urine, nipple secretion, bone marrow and joint fluid aspirates have also been reported to yield microfilariae. (8) Detection of microfilaria in cytology specimens are mostly incidental. Moreover, in these patients the peripheral smears rarely revealed microfilaremia or eosinophilia.

Lymphadenopathy, peripheral blood eosinophilia and microfilaremia which were all absent in the present case. Probably weak host response to the presence of the parasite is responsible. Filaria can exist without microfilaremia (9). Absence of peripheral eosinophilia also reported by Varghese et al. (10) Majority of cases in endemic regions neither show microfilariae in blood, nor any symptom. (11)

The main purpose of this case report is to create awareness in endemic countries like India, it should always be considered as a differential diagnosis of swelling at any site.

CONCLUSION: Though rare, lymphatic filariasis should be considered in the differential diagnosis of swelling in the endemic areas. Careful examination of cytological smears is very important in prompt recognition of the disease and institution of specific treatment especially in unsuspected and asymptomatic cases.

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A

B

Fig. 1: (A, B) showing mass in the axilla

Fig. 2: showing ensheated coiled microfilaria

Fig. 3: Showing microfilarial worm. Plenty of reactive lymphoid and eosinophils in the background.

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