Testicular Filariasis Masquerading as a Testicular Tumor - Case Report with Review of Literature

P Joshi, S Shivde, M Mandolkar

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Abstract

Lymphatic filariasis caused by the nematode Wuchereria Bancrofti is a major public health and socioeconomic problem in tropical and sub-tropical countries. The clinical manifestations of filariasis depend upon the stage in the course of infection in the human host and the worm load.It is a rarity to document filarial worms in histopathology from the testes. We present a case of atypical manifestation of urogenital filariasis where the patient had presented to us with unrelated complaints leading to a diagnostic dilemma.

INTRODUCTION

Lymphatic filariasis caused by the nematode Wuchereria Bancrofti is a major public health and socioeconomic problem in tropical and sub-tropical countries[(1)]. It is estimated that close to 120 million people are affected in at least 80 countries throughout the tropics and subtropics. The clinical manifestations of filariasis depend on the stage in the course of infection in the human host and the worm load. The urogenital manifestations of filariasis can be of many types[(5)]. We present a case of atypical manifestation of urogenital filariais leading to a diagnostic dilemma.

CASE REPORT

A 27-year-old patient presented with complaints of pain in the right scrotum for 3 months. On examination there was evidence of a nodule in the right cord structure. A similar hard nodule was palpable in the lower pole of the right testicle. There was no evidence of acute inflammation. There was no lymphadenopathy. The rest of the genital examination and abdominal examination was unremarkable. The patient underwent further evaluation with ultrasonography of the scrotum and inguinal region. There was a hypoechoic lesion with a speck of calcification in the lower pole of the right testis and a similar hypoechoic lesion in the right cord. There was poor vascularity in the lesion.

Figure 1: Hypoechoic lesion in the right cord.

Figure 2: Hypoechoic lesion in the lower pole of the right testis. A speck of calcification is visible in the centre of the lesion.

There was an associated finding of a small aortocaval lymph node. In view of the above findings a possibility of testicular neoplasm was considered. Testicular tumor markers were within normal range. The patient underwent right inguinal exploration with testicular biopsy of the mass lesion and biopsy of the cord lesion using the Chevasu's technique. The tissues were sent for frozen section. They were reported as foreign body granulomas. The patient had an uneventful recovery. Final histopathology was reported as microfilarial granulomas in the testis as well as the cord lesion. The patient was started on diethylcarbamazine 100mg for 6 weeks.

Figure 3. Microfilaria seen in the testis.

DISCUSSION

The clinical manifestations of filariasis depend upon the stage of infection viz:

- Stage of invasion
- Asymptomatic or carrier stage
- Stage of acute manifestation
- Stage of chronic manifestation

Genital filariasis becomes manifest in a number of ways. It can present as an acute inflammatory disease like funiculitis or epididymoorchitis. This is by far the most frequent manifestation. Chronic manifestations include hydrocoele, lymph varix, lymph scrotum, filarial penis or elephantiasis

of the genetalia and chyluria. Hydrocoele accounts for 90 % of the morbidity due to the above genital manifestations[5].

Review of the literature suggests some rare manifestations of filarial presentations. A Bancroftian subcutaneous nodule in an Indian male resident staying in New York has been reported[3]. Chen Yuehan et al. reported filarial breast granulomas in hundered and thirty-one cases[2]. Microfilaria has been described in a fine-needle aspiration cytology of testes done in a patient with primary infertility[4].

We present a case where the patient presented with the rare manifestation of a nodule in the spermatic cord and the testis which, on histopathology, were documented as filarial granulomas. The patient had no other clinical manifestations of filariasis. The evidence of a speck of calcification in the nodule suggests chronicity of the lesion. It is a rarity to document filarial granulomas in testes in spite of common genital manifestations of the disease. More often than not, they are seen on histology of the inguinal lymph nodes. Presence of such nodules without any other manifestations of filariasis makes it a rare presentation - a diagnostic dilemma.

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Author Information

Pankaj M Joshi, M.S [Gen. Surgery] DNB trainee [Urol.]
Deenanath Mangeshkar Hospital

S. R. Shivde, M.S., M.Ch., FRCS [Urol.] FRCS [Edin] FRCS [Glasg] FEBU
Consultant, Uro Onco Surgeon, Deenanath Mangeshkar Hospital

Mahesh Mandolkar
Department of Pathology, Deenanath Mangeshkar Hospital