

FILARIASIS PRESENTING AS AN EPIDIDYMAL NODULE: AN UNUSUAL PRESENTATION - CASE REPORT

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Abstract

Introduction

Lymphatic filariasis is a public health problem in India. Main clinical features of chronic Bancroftian filariasis are hydrocele, elephantiasis and chyluria. We present an unusual case of genital filariasis which presented with microfilaria in epididymal nodule.

Case presentation

35 year old man presented with a history of swelling in left epididymis for last 3 months insidious in onset and associated with mild pain. On examination there was a palpable, tender and firm nodule measuring 2 cm x1.5 cms in the left epididymis. FNAC revealed multiple microfilaria of *W.bancrofti* present in coiled and elongated forms and confirmed by the presence of sheath and absence of nuclei from tip and tail. The rest of the population comprised of neutrophils admixed with eosinophils lying in a partly haemorrhagic background.

Conclusion

FNAC has proved useful. This is unusual presentation of genital filariasis where microfilaria have been reported in epididymal nodule.

Keywords:

Epididymal nodule,
Fine Needle aspiration
cytology, Filariasis,
Microfilaria.

Introduction

Filariasis is a global problem. It is a major social and economic scourge in tropics of Africa, Asia and Western Pacific part of Americas affecting over 83 countries. Lymphatic filariasis is a public health problem in India. The disease is endemic all over India except in J&K and few northern and north eastern states.^[1] About 95% of cases of lymphatic filariasis are caused by infection with *Wuchereria Bancrofti* as a result of bite of infected mosquito. Main clinical features of chronic Bancroftian filariasis are hydrocele, elephantiasis and chyluria. Genital filariasis in India presents commonly as secondary hydrocele and an associated epididymo-orchitis. Lymphatics of legs, scrotum, arms, penis, vulva and breast are most commonly affected. We present an unusual case of genital filariasis which presented with microfilaria in epididymal nodule.

Case presentation

A 35 year old man presented with a history of swelling in left epididymis for last 3 months which was insidious in onset and associated with mild pain. There was no history of trauma or fever. On examination there was a palpable, tender and firm nodule measuring 2 cm x1.5 cms in the left epididymis. The left testis and spermatic cord were normal on palpation. Complete blood counts including absolute eosinophil count and urine examination were within normal range. No microfilaria was seen in the peripheral blood film. Chest X ray was normal. Ultrasonography findings were non contributory and revealed only a hypoechoic mass in left epididymis. Fine Needle Aspiration Cytology (FNAC) was advised since the suspicion for malignancy was low. Under all aseptic precautions, FNAC of the mass was performed using 22 gauge needle and 10 ml plastic syringe with a detachable syringe holder (Franzen Handle). Three alcohol fixed smears were prepared, first smear was stained with Papanicolaou stain, second with Giemsa stain and third one was kept unstained for any further required stain. Microscopic examination revealed cellular smears comprising of multiple microfilaria of *W.bancrofti* present in coiled and elongated forms and

confirmed by the presence of sheath and absence of nuclei from tip and tail. The rest of the population comprised of neutrophils admixed with eosinophils lying in a partly haemorrhagic background. A final diagnosis of Filariasis was made and patient was treated with a course of diethylcarbamazine. Patient was kept on follow up and the swelling completely regressed clinically after four weeks of therapy.

Discussion

35 year old man presented with a history of insidious swelling in left epididymis for last 3 months associated with mild pain. A palpable, tender and firm nodule measuring 2 cm x1.5 cms in the left epididymis was palpated. Multiple microfilaria of *W.bancrofti* in the form of coiled and elongated structures in epididymal nodule were reported on FNAC. However various other studies have reported adult filarial worms.^{[2][3][4][5]}

Diagnosis of genital filariasis can be confirmed by direct demonstration of microfilaria in blood or aspirated fluid. The routinely available tools for detection i.e circulating filarial antigen (CFA) and ultrasound with high frequency probe showing filaria dance sign (FDS) are widely used but they have some limitations as CFAs are useful in diagnosing active infection in an amicrofilaremic patient and ultrasound poses difficulties in visualizing microfilaria in routine community settings where high frequency ultrasound facilities are not readily available. Moreover, sometimes it is difficult to differentiate benign and malignant neoplasms simply on ultrasound. However some studies have reiterated the importance of ultrasound in diagnosis of genital filariasis^{[6][7]}. In our study ultrasound findings were not suggestive of any etiology and CFA was not performed. Incisional biopsy is contraindicated in testicular lesions because of risk of spread locally and to regional lymph nodes. It has been reported that FNAC is useful if clinical suspicion of malignancy is low.^[8] Again delayed diagnosis of malignancy due to conservative treatment of a supposed inflammatory or other benign condition may be more harmful than the hypothetical risk of seeding by FNAC.^[9] So keeping suspicion of malignancy low in present scenario, FNAC was performed. As to date there is no evidence that FNAC carries a risk of tumour spread in relation to testicular tumours. FNAC has been useful in settings where the prevalence of genital tuberculosis and filariasis is high.^[10]

Conclusion

FNAC has proved useful in reaching at etiology of epididymal nodule as multiple microfilaria have been demonstrated on smears. This case report highlights an unusual presentation of genital filariasis where microfilaria have been reported in epididymal nodule of a patient in J&K.

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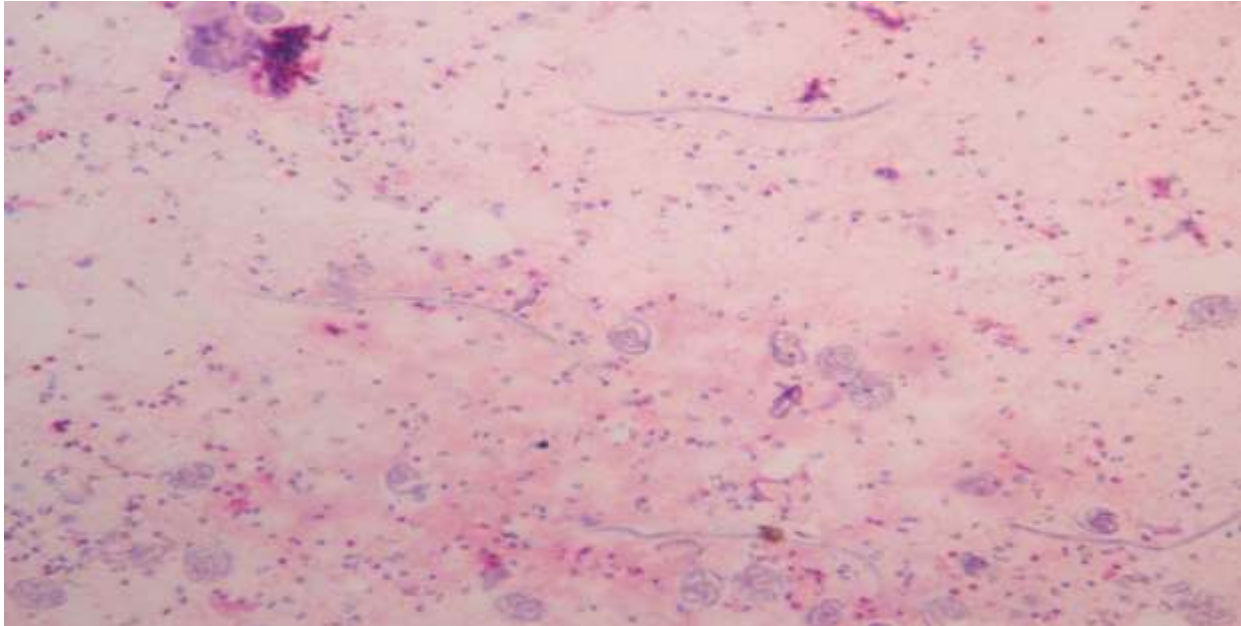


Fig.1: Microphotograph showing numerous coiled structures of microfilaria lying in a background of neutrophils and eosinophils (40x,PAP)



Fig.2: Microphotograph depicting microfilaria showing central nuclei and sheath in a partly haemorrhagic background(80x,Giemsa).