

Original Research Article

Microfilaria in pus sample of an ulcer over Elephantiasis leg: an unusual case presentation

Harapriya Kar¹, Gurjeet Singh^{*1}, A.D. Urhekar¹, Sankarsan Pani², A.V. Hodiwala¹,
S.A. Samant¹, Samir Pachpute¹, Revati Sharma¹

Department of Microbiology¹ and Department of General Surgery², MGM Medical College,
Kamothe, Sector-18, Navi Mumbai-410209, Maharashtra, India

*Corresponding author e-mail: gurjeetsingh360@gmail.com

A B S T R A C T

Keywords

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Lymphatic filariasis is a common public health problem in the endemic areas. Wuchereria bancrofti is the most common parasite which causes lymphatic filariasis in India. The microfilariae are demonstrated in the peripheral blood, body fluid and needle aspirates from breast cancer, bronchial brushing. Microfilariae are not common findings from ulcer over elephantiasis leg.

Introduction

Lymphatic filariasis is a major public health problem in the endemic area of India. Apart from the blood and the lymph node aspirate, microfilariae are demonstrated in the fine needle aspirates smear from different sample like breast cancer subcutaneous nodules in cervical scrap as well as from body fluid like chyluria, chylous ascites, hydrocele fluid also from bone marrow aspirates (Pani's Filariasis, 3rd edition). Filariasis is a disabling parasitic disease (Akhtar *et al.*, 2012).

Case report

A 67 year old male patient from Malad admitted to MGM Medical College

hospital on 27-02-2013 with complain of swelling in both the feet, legs and thighs for last 16 years. He had ulcers over left thigh for 5 years and over right leg since 1 year. Both the ulcers were itching and discharging pus. Patient had repeated rigor with fever almost every two to three months interval. Following each attack of fever, both the legs showed increased oedema. On examination, both the feet, legs and thighs were having non pitting oedema and two ulcers were seen. One on left thigh and one over right leg. Each ulcer was having irregular margin and was white in colour. The edge had a sloping floor pattern and was having slough with discharging pus. The base was induratedly fixed to the underlying fascia and

Figure.1 Clinical photo of patient showing elephantiac leg with discharging ulcer.



Figure.2 Gram staining of pus showing few inflammatory cells with microfilaria.

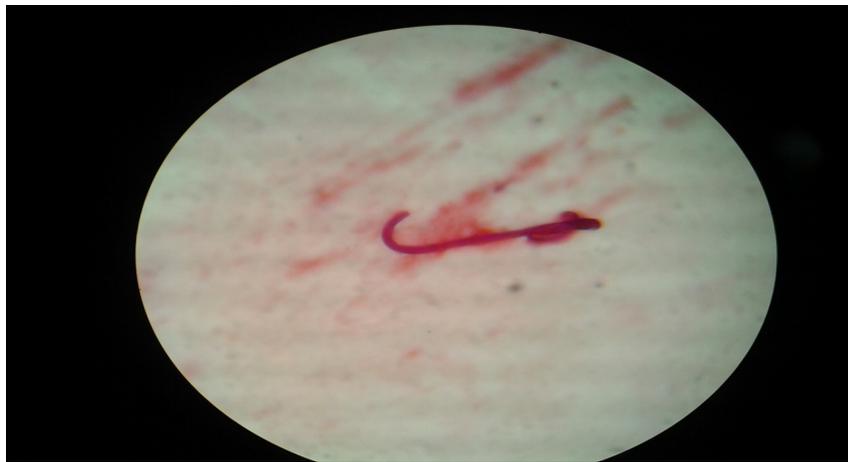


Figure.3 Leishman staining showing microfilaria.



muscles. The skin of both the legs was having black pigmentation and rough scaling. Both inguinal lymph nodes were enlarged, discrete, mobile and firm in consistency without tenderness. The patient gave history of frequency of micturition without retention. Per rectal examination, revealed Benign Hypertrophy Prostate. The patient had under gone (Rt) inguinal hernioplasty about three months ago and had wound infection for which there was wound gapping at the site of the surgery. All other systems were in normal limit.

As the ulcer was infected and having pus discharge the pus was sent for c/s and for microscopic examination.

Results and Discussion

Microscopic findings

Pus from the ulcer was sent to Microbiology department .Gram staining showed microfilaria of size 250_350 with many inflammatory cells (Wuchereria bancrofti) under binocular microscope.

Second sample received in microbiology laboratory after four days of the treatment with Diethyl carbamazine, the sample showed no microfilariae in the smear.

Filariasis is the most common cause of lymphatic oedema in world. This disease is commonly seen in India, Africa and South America. Nearly 5-10% of population are affected by this disease. It is caused by *Wuchereria bancrofti*, *Brugia malayi*, and *Loa loa* and is transmitted by *Culex* mosquito. Nearly 90% of microfilariae are *Wuchereria bancrofti*.and are seen in coastal zones of India. People with poor sanitation are sufferer of this disease. It can affect in acute form like

fever, headache, malaise, inguinal and axillary lymphadenitis, Lymphangitis, cellulitis, abscess formation, ulceration and funiculo epididymo orchitis. In the chronic form it can lead to elephantiasis of legs, arms, scrotum, vulva, penis and ,breast. Nearly 85% of the secondary hydrocele of Tunica Vaginalis Testis is caused by filariasis, however chyluria, lymphorrhoea and abdominal lymphatic varices are rare and unusual presentation of filariasis. This lymph oedma comes under low flow high protein oedma which present as blubbery tissue under skin. Filariasis affects all systems except Central Nervous System (CNS) as there are no lymphatics in CNS. Eosinophilia and microfilaraemia are common in the acute phase. The chronic stage of bancroftian filariasis is characterized by lymphadenopathy, lymphedema, hydrocole and elephantiasis (Nutman *et al.*, 2001).

Gram staining and Leishman staining has an important role in diagnosis of sub-clinical filariasis, although cytological diagnosis is often not requisitioned. Most cases of microbiological diagnosed filariasis are clinically unanticipated. Therefore, the clinicians and microbiologists need to be more vigilant, especially in the endemic zone(s) of filariasis, for early diagnosis cum treatment of the cases. It shall ensure avoidance of complications and associated ailments at a later date.

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