

Filarial Scrotum – A Case Report

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ABSTRACT

*Filarial lymphedema of scrotum is a uncommon and challenging problem in the tropics in recent times. Filariasis is a mosquito-transmitted parasitic disease. Thus, filarial scrotum is a late and chronic manifestation of filariasis. It is estimated that in endemic areas, over 40 million persons suffer from the chronic disfiguring manifestations of filariasis. Filarial scrotum is a scrotal swelling resulting from a parasitic infection with *Wuchereria bancrofti*, endemic to tropical regions around the world. A filarial hydrocele is not only debilitating but also has economic implications due to the huge numbers of affected adult males throughout the tropical and subtropical endemic regions and countries. We hereby report a case of massive lymphedema of scrotum which was managed successfully at our institute with excision of scrotum and penile skin and implantation of both testes in corresponding thigh with skin grafting of penile shaft. The post operative course was uneventful and patient was relieved of his physical and psychological stress.*

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I. INTRODUCTION

Filarial lymphedema is a well known complication of lymphatic filariasis, especially in the tropics. More often, filarial lymphedema of the limb is seen, but cases of filarial scrotum are also seen, though not as much as the former. Breast and upper limb are the other sites for filariasis⁽¹⁾. With improvement in the prevention and therapeutic management of lymphatic filariasis the incidence of filarial lymphedema has come down considerably of late⁽²⁾.

II. CASE HISTORY

A 60 years old man came to out patient department with complaints of scrotal swelling for past 5 years. There was no history of fever. Patient had history of difficulty in micturition and pain over scrotum.

On examination, A massive swelling of size 40 x 30 cms in size involving the scrotum and penis present. Glans penis was buried deep and external urethral meatus was not visible and both testes were not palpable. Skin was edematous and grossly thickened with secondary changes.

Patient was taken up for surgery under spinal anaesthesia, scrotal excision was done by placing a circumferential incision over the root of scrotum. Edematous skin over the shaft of penis was also removed. Both Testes and cord structures were isolated and the perineum was closed with the remaining scrotal skin. Split thickness skin grafting was done over penile shaft and both testes were implanted in the corresponding thigh.

The excised specimen weighed about 7.5 kilograms and histopathology showed chronic inflammation, marked edema and dilated lymphatics.



1

Fig 1 - shows clinical image of Filarial scrotum, excision preserving both testes and penis.



2

Fig - 2 shows intraoperative image after scrotal



3

Fig C - shows penis covered with split thickness graft and both testes implanted in both thighs.



4

Fig D - shows 90% graft uptake and recipient site dressing intact at the time of discharge.

III. DISCUSSION

Lymphedema scrotum occurs due to blockage or dysfunction of the lymphatic channels by adult worms. Lymphatic filariasis is caused by infection with the mosquito-borne parasite *Wuchereria bancrofti* and *Brugia malayi*⁽³⁾. It is characterized by lymphangitis due to bacterial and/or fungal infection, and who present chronic lymphangiectasia⁽⁴⁾. Its prevalence in endemic areas has reduced considerably due to improved prevention and mass filarial chemoprophylaxis.

The occurrence of acute episodes of dermal lymphangioadenitis due to secondary bacterial infection in lymphatic vessels that are more superficial is the greatest risk factor for the appearance of lymphedema scrotum⁽⁵⁾.

Lymphedema scrotum affects on a patient's life, causing physical disability, inability to work, difficulty in micturition and sexual intercourse causing economic loss, and even depression⁽⁶⁾.

Surgery is the mainstay of treatment for filarial scrotum when there is difficulty in micturition and clinically large scrotum causing pain and discomfort⁽²⁾. The goal of surgery is excision of the scrotum as well as prevention of recurrence. Surgery for filarial scrotum may be difficult due to the presence of fibrosis, deformity and blood loss .

Other surgical procedures may include reconstruction of the scrotal sac, resection of scrotal skin and may also involve penile reconstruction if the penis is involved⁽⁷⁾. Also, Nodovenous shunt can be done prior to scrotal excision which can help to reduce the size of scrotal skin⁽⁸⁾. Reconstruction surgery is needed when the skin of the scrotum is thickened, or when the skin has a dripping of lymphatic fluid called “lymph scrotum.” Patient may also have associated vaginal hydrocele which needs appropriate treatment.

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