FILARIAL ELEPHANTIASIS OF THE SCROTUM: MANAGEMENT UNDER MINIMAL FACILITY

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Summary :

Filarial Elephantiasis of the Scrotum is not uncommon in Bangladesh. This paper describes how such a case was managed with minimal available facility in a peripheral hospital. The patient was an old man with advanced elephantiasis. After a brief workup the patient was operated upon. Spinal anaesthesia was given by the surgeon himself as there was no anaesthetist. After complete excision, the testicles were burried in the thighs. Recovery was uneventful. It is concluded that surgeons can successfully manage these cases even in hospitals with limited facility. Scrotal reconstruction, through the preferred procedure and aesthetically more acceptable, is not recommended under these circumstances.

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Introduction:

Elephantiasis of the scrotum due to filariasis is not an uncommon problem in Bangladesh. Due to lack of health education and ignorance they often attain a huge size. Most of these patients are poor and cannot afford to go to the distant referral centres. So, these patients are mainly seen by the surgeons working at peripheral hospitals. But the management of scrotal elephantiasis in most of these hospitals present the following problems:

i. Lack of adequate operating facility, including general anesthesia and fine instruments for plastic and reconstructive surgery.

ii. Lack of manpower with formal training in plastic surgery for scrotal reconstruction. This type of surgery is considered formidable even by reconstructive surgeons.

The purpose of this paper is to enable a surgeon working at a hospital with limited facility to by-pass these problems and offer an acceptable surgical management of this disease. Here a case of advanced scrotal elephantiasis is presented which was successfuly managed with minimal available facility.

Case Report:

A 70 years old male beggar was admitted to Munshiganj District Hospital with a big scrotal swelling which was there for about 5 years. He did not come earlier because he had no problem. But constant oozing and pain along with the increasing heaviness during the recent months compelled the patient to come for surgical treatment.

On examination his scrotum was found to be enlarged with marked thickening of the skin (Fig-1). The surface showed fine irregularities and multiple small blister formation. There was also some oozing from the surface. The penis was not involved and regional lymph nodes were not significantly enlarged.

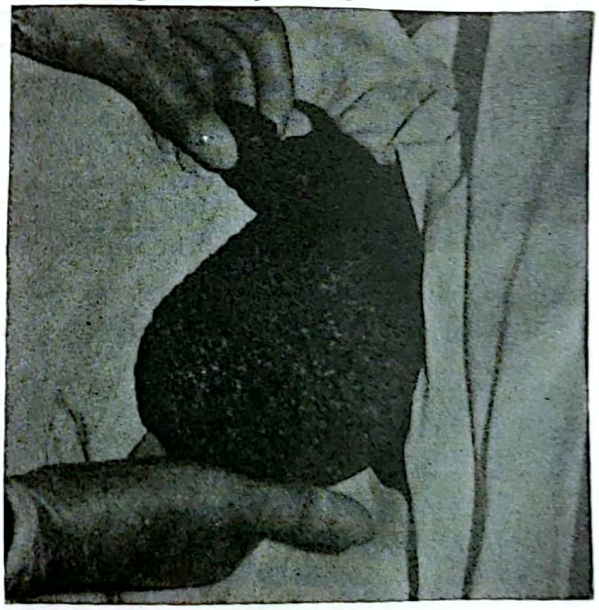

Fig-1: *Preoperative picture of Filarial Elephantiasis of the scrotum, with marked thickening of the skin and blister formation.*

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A brief preoperative workup included routine urinanalysis, TC DC, Hb, ESR, fasting blood sugar, blood urea, CFT for Filaria, Chest X-Ray and ECG were done. There was moderate eosinophilia and CFT was positive for filaria. Other tests were essentially normal. A course of diethylcarbamazine was given.

The patient was operated on 24th day of hospitalization. Spinal anesthesia (with 5% heavy Xylocaine) was given by the surgeon himself, as there was no anesthetist. Excision of all involved lymphedematous tissue was done. Bleeding points were controlled by ligature and diathermy. Both the tunical sacs were everted as they contained some hydrocele fluid.The testicles were then carefully burried in a subcutaneous pouch in the thighs of their respective side. Primary closure of the wound was done. An episode of mild hypotension was encountered preoperatively which was readily corrected by an adjustment in intravenous fluid. Postoperative recovery was uneventful and stitches were removed on the 8th and 10th postoperative day. The patient has been followed up for one year now, and he has no complication (Fig. 2).

Fig-2: *Postoperative picture one year after excision of the scrotum; testicles can be seen burried in the thighs.*

Discussion:

Filarial elephantiasis occur in association with its repeated infection in highly endemic areas[1]. The disease is not an uncommon problem in our country but parasitological diagnosis of such infection is rare[2]. In the West, acquired genital elephantiasis are very uncommon and most cases are secondary to lymph node dissection, injury or irradiation[3]. There is no medical treatment for scrotal elephantiasis[4]. Surgical treatment for early cases of scrotal elephantiasis involves restorative operations where broad cellular-cutaneous bridges are constructed uniting the scrotum to the thigh. For advanced cases where skin changes have become permanent, excisional treatment is mandatory[5]. After excision of all lymphedematous tissue the testes may be implanted in the thighs[4]. But reconstruction of the scrotum to provide testicular covering is definitely more acceptable aesthetically. Apesos and Anigian[3] recommended excision of all involved lympedematous skin of the scrotum and the use of posterior scrotal flaps for testicular covering. Sun and Zhong et al[6] used 3 types of lateral groin flaps for the reconstruction of the scrotum.

For scrotal reconstruction a surgeon needs considerable expertise in the field. In addition, they are time consuming and require good operating and anesthesia facility. This kind of setting cannot be expected at peripheral hospitals of our country. Under these circumstances elephantiasis of the scrotum can be managed in the way described in this case report.

Where there is no anesthetist, the use of spinal anesthesia by the surgeon himself[7] serves the purpose quite adequately. As for the operative procedure, excision of the scrotum is followed by implantation of the testes in the thighs without going for scrotal reconstruction. The procedure is relatively straightforward in comparison to reconstruction of the scrotum by complex groin and scrotal flaps.

The absence of scrotum should not bother the patient, specially if he is an old man. Regarding the need for instruments, a usual cutting set and half a dozen haemostats and tissue forceps are all that is required for the procedure to be carried out safely.

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