

Penile and scrotal plasty for genital elephantiasis: A case report

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ABSTRACT

Introduction: Filarial penoscrotal elephantiasis is a chronic lymphangitis with hypertrophy of the external genital organs (EGO) and still exists in countries with endemic filarial diseases. **Case Report:** We report a penile-scrotal elephantiasis case in a 20-year-old patient. He consulted for a scrotal mass reaching the knees with low urinary tract symptoms (LUTS) due to the burial of the penis. Excision followed by a scrotal skin plasty was performed. The aesthetic and the long-term functional results were satisfactory. **Conclusion:** The elephantiasis of external genital organs is becoming less and less frequent as a condition and surgery always occupies a place of choice in its management.

Keywords: Elephantiasis, Filariasis, Plasty, Scrotum

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INTRODUCTION

Penoscrotal elephantiasis is a chronic lymphangitis with hypertrophy of the external genital organs (EGO), characterized by its rarity. The filarial etiology predominates in the endemic countries. Apart from these countries, it is bacterial etiology which predominates or more rarely, elephantiasis can be primitive or idiopathic [1, 2]. Elephantiasis concerns most often the scrotum or all penoscrotum. The epididymo-testicular content is always respected [3]. The aesthetic and functional consequences make the surgical treatment a challenge for the surgeon. We report the clinical presentation, the treatment and the outcome of a case of penoscrotal elephantiasis of a filarial origin.

CASE REPORT

It was a 20-year-old patient with a history of bathing into ponds who consulted for an enormous penoscrotal mass which has been progressively increasing for 10 years. It was associated with a large bilateral painless leg and low urinary tract symptoms (LUTS) such as dysuria (straining and urgency). The patient was in good general condition with normal constants. The examination revealed an enormous penoscrotal mass measuring 40x25x10 cm with a wrinkled aspect of the scrotal and penis skin (apart from the posterior parts), hard with orange peel like skin and small nodules on the dorsal surface of the hardly visible penis (Figure 1). The blood count showed an anemia at 9.3 g/dl and leucopenia at 2600/mm³ with a hyper eosinophilia at 17.1%. The urine culture showed

an urinary infection with *Escherichia coli* which was treated. The diagnosis of filarial penoscrotal elephantiasis was considered. The surgical exploration showed testis and urethra without any particularities. An excision and a penile-scrotal plastic surgery using the posterior part of the scrotal skin was performed (Figure 2). The surgical follow-up was marked by a release of the penile sutures which required another excision of the sutures. Pathologic examination of the surgical specimen showed a histologic aspect in agreement with elephantiasis of the testicles (mechanical obstruction of the lymphatic vessels with chronic inflammation) and absence of malignant signs. The patient was checked up two months later (Figure 3) and 14 months later (Figure 4) with a satisfactory cosmetic appearance of the external genitalia.

DISCUSSION

The elephantiasis of the external genital organs (EGO) is a frequent condition in filarial endemic areas [2]. It is the consequence of a mechanical obstruction of the lymphatic ducts [4]. It particularly affects adults and men. The etiology of EGO elephantiasis can be infectious (filariasis, tuberculosis, syphilis, donovanose, onchocerciasis), of a radiation origin, iatrogenic (after pelvic surgery) or



Figure 2: Postoperative final aspect.



Figure 1: Enormous penoscrotal elephantiasis reaching the knees.

idiopathic [2–5]. In our patient, the cause of elephantiasis was filarial. In certain countries, late medical checkup is due to the fact that EGO conditions are perceived as a shame. Elephantiasis most often limited to the penis and the scrotum. Affection of the penis only is rare, but the epididymo-testicular content is practically always respected [3] which has been observed in our patient. The urinary infection noticed in our patient can be explained by the burial of the penis. The bladder drainage was embarrassed which caused dysuria. The diagnosis is essentially clinical. The hypertrophy and the deformation of the external genital organ are the main manifestations of the penoscrotal elephantiasis [5–6]. At this stage, reconstruction surgery is often the main alternative to restore the aesthetic and functional aspect of the affected organs [7]. It consists of the surgical excision of the affected tissues, and a scrotal reconstruction [2–8]. Many techniques have been described: the use of pedicled skin flaps taken at the inguinal or suprapubic area, the use of thin free skin graft and the use of cranio-dorsal part of the scrotum [3]. This last technique seems to give a good functional and aesthetic result. The results of this surgery are satisfactory with no recurrence after 14 months follow-up.



Figure 3: Appearance of external genitalia at second month after operation.



Figure 4: Appearance of external genitalia at 14th month after operation.

CONCLUSION

The elephantiasis of external genital organs is becoming less and less frequent as a condition. In sub-Saharan Africa, the etiology of the filarial still exists. Patients feel reluctant to get consulted; in so doing they come to consultation at a late stage when only surgery can be performed for treatment, because of socio cultural realities when the intimate parts are affected.

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Yaya Sow – Substantial contributions to conception and design, Acquisition of data, Analysis and interpretation of data, Drafting the article, Revising it critically for important intellectual content, Final approval of the version to be published

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Conflict of Interest

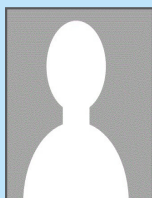
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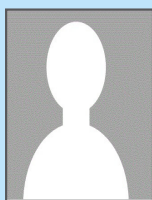
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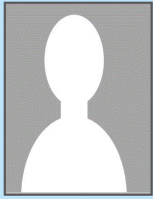
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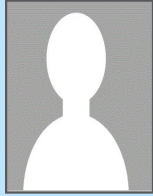
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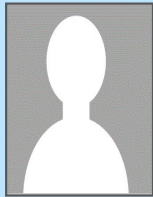
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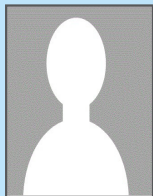
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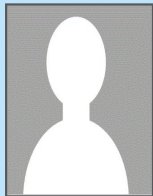
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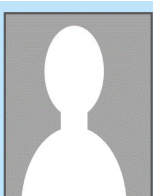
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