

# Congenital penile lymphedema treated by circumcision: A case report

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## Summary

*A neonate with congenital penile lymphedema successfully treated by circumcision was reported.*

**Key words:** Lymphedema-penis

## Introduction

Lymphedema describes an abnormal condition in which there is retention of lymphatic fluid within the loose subcutaneous tissues. This condition may occur in any location throughout the body as the fluid accumulates owing to inadequate drainage through lymphatic channels. Lymphedema of the penis is quite rare in the children. We have presented a case with congenital penile lymphedema treated by surgically.

## Case Report

*A 2-days old boy who had a swollen penis at birth was admitted to our department. The penis was markedly swollen and the scrotum was also involved but to a lesser degree (Fig. 1). There was no erythema nor tenderness. He did not have a fever and there was no history of trauma or insect bites. The testes and appendages were normal on palpation. The infant was able to pass urine without difficulty. The white blood count and urine analysis were normal.*

*Physical examination was unremarkable except for penile edema.*

*Ultrasonographic examination of the external genitalia showed grossly subcutaneous edema of penis and slightly edema of the scrotum (Fig. 2). Initially no therapy was advocated and he was observed for two months. At the end of the second month, the penile lymphedema was still present without any change.*

*That is why surgical intervention was planned and preputium and a part of distal penil skin circumcised under the general anesthesia. Postoperative course was uneventful and there has been no recurrence for the last 6 months (Fig. 3). Histopathological examination of the excised penile skin revealed an increase of vascularization and accumulation of lymphatic fluid in the interstitial tissue.*

## Discussion

Lymphedema is a swelling caused by an abnormal collection of lymph fluid in the interstitial tissue. There are two types; primary or idiopathic in which there is no known cause and secondary or acquired which occurs due to a known disease or disorder (1,3). The primary lymphedema is called congenital when it is present at birth and praecox when it appears in childhood. Although the precise pathophysiology of congenital lymphedema has not been clearly elucidated, it is believed that the superficial lymphatic network is hypoplastic or absent. Congenital lymphedema most often involves the lower extremities but it may occasionally occur at the external genitalia.

When the genitalia is involved with lymphedema, scrotum and penis are usually affected at the same degree. But, lymphedema was limited only with penis in our case.

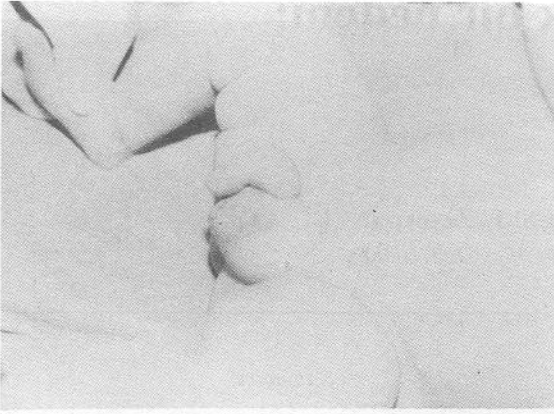


Figure 1. Preoperative view of the penile lymphedema.

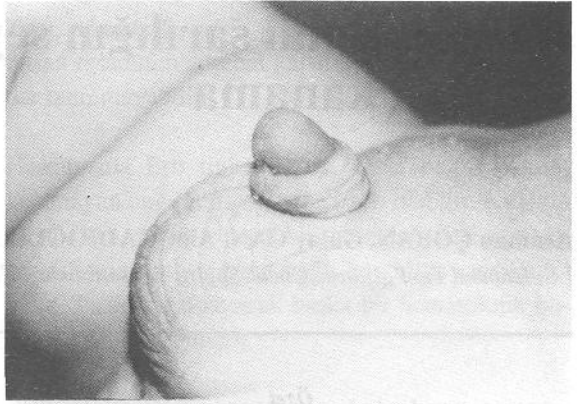


Figure 3. Postoperative appearance of the case at the 6th month.

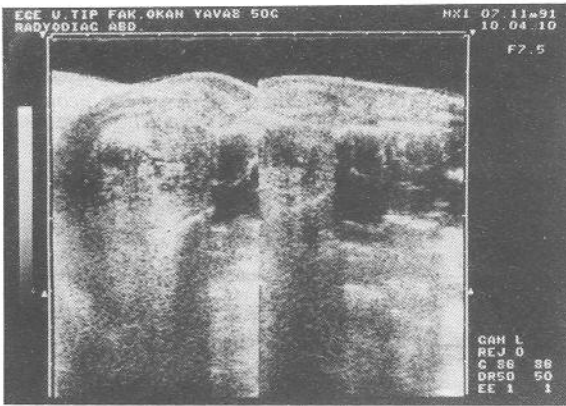


Figure 2. Soft tissue ultrasonographic image of the genitalia.

Excisional surgical procedures have been advocated in the treatment of penile and scrotal lymphedema in children (2,4). But they all share common theme; excision of the superficial lymphatic, subcutaneous tissue and skin at the level of Buck's fascia on the penis and dissection of the spermatic cord and testicles from the edematous scrotal mass.

In our opinion, these radical surgical techniques are not necessary if lymphedema is limited only with penis. An extensive circumcision may be curative in the treatment of cases with congenital penile lymphedema.

We have performed on extensive circumcision in our case with congenital penile lymphedema. The eventual cosmetic and functional results were acceptable and recurrence was not seen.

### Kaynaklar

1. Bulkley GJ: Scrotal and penile lymphedema. J Urol 87:422, 1962
2. Feins NR: A new surgical technique for lymphedema of the penis and scrotum. J Pediatr Surg 15:787, 1980
3. Sauer PF, Bueschen AJ, Vasconez LO: Lymphedema of the penis and scrotum. Clin Plast Surg 15:507, 1988
4. Trapper D, Eraklis AJ, Colodny AH, Schwatz M: Congenital lymphedema of the penis. A method of reconstruction. J Pediatr Surg 15:481, 1980