# Priapism After a Scorpion Sting on the Penis in a Child

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✓ A child presenting with priapism after a scorpion sting is reported. Successful outcome was achieved with cavernosal aspiration. Possible aetiological factors and treatment options are discussed.

Key words: Priapism, scorpion venom, penile erection

✓ Çocukta Penisden Akrep Sokması Sonrası Gelişen Priapizm
Penisinden akrep sokmasını takiben priapizm gelişen bir çocuk olgu sunuldu. Kavernöz aspirasyonla başarılı sonuç alındı. Olası etyolojik faktörler ve tedavi seçenekleri tartışıldı.

Anahtar kelimeler: Priapizm, akrep zehiri, penil ereksiyon

## INTRODUCTION

Priapism is defined as persistent and painful erection without sexual desire. During the last decade tremendous developments have occured in the understanding of physiology and pathophysiology of erection and priapism<sup>(1)</sup>. Pathophysiologically, priapism can either be high-flow (nonischemic) priapism or low flow (ischemic) priapism<sup>(2)</sup>. Now it's well known that low-flow priapism is one of the emergent conditions in urological practice.

Priapism in paediatric population is very rare, except those with sickle cell anemia<sup>(3)</sup>. But, there is still an arguement about the definition and management of paediatric priapism. Some of the authors believe that prolonged erections in children (especially in infants) are different and they should not be managed as priapism<sup>(4)</sup>. Because there is no report identifying a permanent injury from prolonged erection in infants.

Here, a child presenting with priapism

after a scorpion sting on his penis is reported.

### CASE REPORT

An 18-month-old boy was brought our hospital 3 hours after being stung by a scorpion on his penis. His parents had noticed him having involuntary contractions, respiratory difficulty and found a scorpion on his penis while they had been working in the garden. Antihistaminic, steroid and a single dose of scorpion antivenom had been administered at the emergency service of the state hospital. Then he had referred to our institution because of his unconciousness and persistent erection. His unconciousness had resolved during transportation. His vital signs were normal when he was seen in our hospital. His penis was on rigid erection and the site of scorpion sting was apparent on the dorsum of his penis. There were no other pathological findings on physical examination. His complete blood count (including red cell morphology and white cell count), urinalysis,

chest X-ray and analysis of arterial blood gases were normal. Intravenous 1/3 serum physiologic 1750ml/m $^2$  infusion and  $O_9$  4 L/min were initiated. Antihistaminic and dexamethasone 0.15 mg/kg were administered. Cavernosal aspiration with a 23 G needle produced a rapid detumescence. Analysis of the aspirated cavernosal blood gases revealed slight acidosis and hypoxia. Prophylactic antibiotic (ceftriaxone mg/kg/day) was administered. His penis was still flaccid on the next day he was discharged uneventfully.

## DISCUSSION

Scorpion sting is very rare. There is only one reported case of penile scorpion sting <sup>(5)</sup>. However he had not experienced piapism or erection. Treatment of scorpion sting is empiric. Administration of scorpion antivenom is generally recommended for the cases with systemic manifestations, especially in children just as the reported case.

Priapism is associated with a wide range of aetiological factors<sup>(2,3)</sup>. There are some authors including scorpion stings among them<sup>(6)</sup>. But, there is no well documented case of priapism due to scorpion sting. Priapism may be a result of its systemic manifestations. However, scorpion venoms may have some effects on Ca<sup>++</sup> and K<sup>+</sup> channels of smooth muscle cells<sup>(7,8)</sup>. For this reason scorpion venoms may have an erectogenic effect when administered directly into the cavernous bodies.

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