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A delayed foreskin-sparing approach to the management of penile fractures in uncircumcised Jamaican men

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ABSTRACT

INTRODUCTION: The traditional surgical approach to penile fracture is to perform a circumferential subcoronal degloving incision emergently to repair the injury. This approach necessitates circumcision to avoid foreskin complications. We present four men who had a delayed foreskin-sparing approach and discuss its advantages.

PRESENTATION OF CASE: Four of five uncircumcised patients who had suspected penile fractures secondary to coital injury, and without suspicion of concomitant urethral injury, had a delayed exploration, seven days after injury, utilizing an incision directly over the palpable haematoma, at the location of the tunical defect, thereby resulting in foreskin preservation. Two of 5 patients had repair under general anaesthesia, one under local anaesthesia and surgery was cancelled in another because upon reassessment at seven days he had normal erections and a normal penile examination. At follow up, all men had good functional and cosmetic outcomes.

DISCUSSION: Uncircumcised patients with penile fractures, without suspicion of urethral injury, may undergo a delayed repair without prophylactic circumcision since there is minimal risk of foreskin complications. Delayed repair decreases the incidence of negative explorations by fostering a conservative approach in mimicking conditions such as superficial vein lacerations. It also enables the use of local anaesthesia in an elective ambulatory setting.

CONCLUSION: Delayed repair of penile fractures results in foreskin preservation, facilitates elective ambulatory care under local anaesthesia and decreases the incidence of negative surgical explorations.

1. Introduction

The current standard of care for penile fracture is immediate repair through a circumferential subcoronal degloving incision. This approach necessitates circumcision in uncircumcised men to avoid postoperative foreskin complications. A large proportion of Jamaican men are uncircumcised and seem to prefer to retain their foreskin after surgical repair. We therefore offered a delayed approach in selected cases, surgically exploring the penis directly over the site of tunical injury, thus enabling preservation of the foreskin. This approach also had other beneficial outcomes other than foreskin preservation. We report on the process of care, the unintended benefits and the outcomes of this foreskin-preserving approach in a series of 5 patients.

2. Case presentation

Utilizing the CARE guidelines [1], we report on five cases of clinically diagnosed penile fracture in uncircumcised men seen at the University Hospital of the West Indies, Jamaica, from July to November 2014 [Table 1]. The ages ranged between 35 and 53 years and all injuries were secondary to coital mishaps. All five patients presented to the emergency room within 24 h and reported a popping sensation in the penis immediately followed by partial detumescence and diffuse penile swelling. One case was deliberately not offered the option of a delayed approach because there was clinical suspicion of urethral injury, evidenced by urinary retention, and he had an immediate subcoronal degloving exploration. The remaining patients were offered the option of immediate repair via a degloving incision with accompanying circumcision or a delayed repair directly over the tunical injury and without circumcision. All four patients opted to have a delayed

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repair, indicating that foreskin preservation was the main reason for their decision. Informed consent was obtained and surgical repairs were performed by two urologists who regularly manage patients with penile fractures.

The four patients with uncomplicated penile fractures were discharged from the emergency room on oral Diclofenac Sodium 50 mg thrice daily to reduce pain and swelling, and advised to refrain from any sexual activity. Seven days after injury, they were reviewed, and a meticulous examination of the penis was done, but the most important clinical finding checked was the presence of the rolling sign as this feature determines the feasibility of a direct localized repair. Upon re-examination, 3 of the 4 cases had complete resolution of the diffuse swelling and the rolling sign was elicited [Fig. 1]. These 3 patients subsequently had localized repair in an ambulatory setting on that same day, 2 under general anaesthesia and 1 under local anaesthesia using a dorsal penile nerve block as this was the surgeon's preference.

Repair was performed using a 2 cm skin incision over the palpable haematoma, and sharp dissection done through the Dartos fascia and capsule of the haematoma. The clot was evacuated and the apices of the torn Buck's fascia and tunica albuginea were identified. Repair was done using a 3-O polyglactin suture with a continuous technique.

The fourth patient reported having normal erections, and on examination there was complete resolution of the swelling and no palpable haematoma. An MRI scan of his penis revealed an intact corpus cavernosum and a small discrete subcutaneous soft tissue swelling. A ruptured superficial penile vein was diagnosed which sometimes mimics a penile fracture at initial presentation [2]. Surgery was therefore cancelled.

Table 1
Management of cases.