FRACTURE OF THE PENIS: REPORT OF 9 PATIENTS TREATED EITHER SURGICALLY OR CONSERVATIVELY

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SUMMARY

In this paper nine patients with penile fracture were reported. Of these patients eight were treated surgically and one was treated conservatively. In all patients erectile function of the penis was preserved and there was no serious postoperative complication. Certainly, we believe the importance of early surgical repair. But for selected patients conservative management can be considered, although it requires a longer hospitalization time than that of surgical intervention.

Key words: Penis, fracture

INTRODUCTION

Fracture of the penis is a rare urological emergency resulting from a direct external force to the erectile tissue. Usually it occurs during sexual intercourse, masturbation or unconscious manipulation. After a cracking sound, immediate detumescence, pain, deformity and haematoma develop. Presently, in the treatment of penile fracture early surgical management has been advocated by many authors in order to reduce or prevent the complications such as pain and angulation on erection and subsequent difficulty with coitus (1-6).

Herein we present our experience in nine patients with penile fracture, eight of which were treated surgically and one conservatively.

METHODS

Over a six-year period (1985-1991), we have evaluated and treated nine men with fracture of the penis in our clinic. Patient age at presentation ranged from 17 to 49 years, with a mean of 29 years. Of these patients five had been injured during sexual intercourse, two during masturbation and two during unconscious manipulation. All patients reported a cracking sound accompanied by pain, rapid detumescence, swelling and deviation toward the side opposite the injury but they voided spontaneously. There was no evidence of urethral injury. The interval between injury and admittance to the hospital varied between 4 hours to 6 days (mean 24 hours). Of these patients eight were treated by immediate surgical exploration via a distal circumferential incision below the glans, followed by degloving of the penile skin to the area of the tear, evacuation of the haematoma and debridment of the edges of the tear. Defects in the tunica albuginea were closed primarily with 4-zero vicryl or PDS interrupted sutures. Later on penile curvature was tested by creating an artificial erection. In all patients only one corpora cavernosa was torn in the lateral aspect, in addition the corpus spongiosum was involved in a patient without urethral rupture. In two patients the tears were in the middle third of the penis whereas in the others the tears were localized in the proximal third of the penis. The urethra was catheterised for 2 or 3 days and a compressing dressing was also applied. Prophylactic antimicrobial agents were used. The patient who was treated conservatively had a minimal haematoma at the root of the penis which did not expand. He was treated by inserting an urethral catheter and a penile splinting with pressure dressing. Prophylactic antibiotic and antiinflammatory agents were also administered.

RESULTS

In all patients the erectile function of the penis was preserved and there were no serious postoperative complications leading to pain or angulation on erection and effecting sexual function. Only one patient who underwent operation 6 days after the injury had a small fibrotic plaque at the area of the tear and slight angulation, but had normal erection and regular coitus.

The duration of hospitalization ranged from 3 to 6 days (mean 4 days) for the patients treated surgically. The conservatively treated patient was discharged from the hospital after seven days. The mean duration of follow-up was 3 years.

Table. Penile fractures.

Case no	Age (years)	Cause	Site of tear	Time from trauma	Treatment	Result
1	N.U.38	Coitus	Left corp. caver.	8 hrs	Surgery	Good
2	M.A.24	Coitus	Right corp. caver.	4 hrs	Surgery	Good
3	S.C.30	Coitus	Right corp. caver.	24 hrs	Surgery	Good
4	S.G.22	Mastur.	Left co. cav. corp. spon.	36 hrs	Surgery	Good
5	A.O. 49	Uncons. manipu.	Right corp. caver.	9 hrs	Surgery	Good
6	T.S.17	Mastur.	Left corp. caver.	6 days	Surgery	Fibrotic plaque
7	M.K.27	Coitus	Left corp. caver.	12 hrs	Surgery	Good
8	A.R.29	Coitus	Left corp. caver.	48 hrs	Conservative	Good
9	C.B.27	Uncons. manipu.	Left corp. caver.	5 hrs	Surgery	Good

DISCUSSION

Although fracture of the penis is easy to diagnose, there is no agreement on its treatment. Early reports tended to favor conservative methods whereas more recent reports advocate surgical intervention (1-7). Conservative treatment consists of urethral catheterisation, pressure dressing, local cold application and administration of antibiotic, antiinflammatory and sedative agents (7,8). The use of antifibrinolytic agents has also been recommended by some authors (9). The complication rate has been reported as 40 percent in patients treated conservatively and 10 percent in patients treated surgically (10). Although it was emphasized that early surgical intervention should be the preferred form of management, we think that all fractures of the penis do not require surgical intervention. Klein and coworkers have advocated that the absence of a tunica albugineal rent on cavernosography allows these patients to be managed conservatively, otherwise surgically (11). However the absence of a rent on cavernosography is never diagnostic and the role of cavernosography in the evaluation of fractures of the penis is limited and only in doubtful states should it be considered. There was not any doubt in the diagnosis of our patients and we did not need to perform cavernosography. If haematoma is minimal and does not expand, and tear is minor, conservative approach can be considered. Of our patients only one had these criteria and he was treated conservatively, without any complication. We certainly believe in the importance of early surgical intervention. But for selected patients having the criteria mentioned above we recommend conservative management although it requires a longer hospitalization time.

Surgical intervention must be performed as soon as possible because the success rate is high in early surgical interventions. As a matter of fact in a patient who had a surgical repair as late as six days after the injury, a fibrotic nodule developed postoperatively. He is lucky that he has no difficulty in coitus, otherwise a second operation would have been necessary.

For the surgical management of penile fractures two different incisions are used: a distal circumferential incision or a direct incision over the suspended site of rupture. The advantages of the distal circumferential incision are: excellent exposure and evaluation of the tear, controlateral corpus cavernosum and corpus spongiosum. We have preferred this kind of incision although it required deeper dissection for the tears in the proximal penile shaft. The incisions over the tears can be considered for the patients with tears in the proximal penile shaft and without urethral injury.

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