

Provided for non-commercial research and education use.
Not for reproduction, distribution or commercial use.



This article appeared in a journal published by Elsevier. The attached copy is furnished to the author for internal non-commercial research and education use, including for instruction at the authors institution and sharing with colleagues.

Other uses, including reproduction and distribution, or selling or licensing copies, or posting to personal, institutional or third party websites are prohibited.

In most cases authors are permitted to post their version of the article (e.g. in Word or Tex form) to their personal website or institutional repository. Authors requiring further information regarding Elsevier's archiving and manuscript policies are encouraged to visit:

<http://www.elsevier.com/copyright>



Case report

Second fracture of the ipsilateral corpus cavernosum

Vijay Naraynsingh, Ravi Maharaj, Dilip Dan, Seetharaman Hariharan*

Department of Clinical Surgical Sciences, Faculty of Medical Sciences, The University of the West Indies, St. Augustine, Trinidad and Tobago

ARTICLE INFO

Article history:
Accepted 17 January 2011

1. Introduction

Only 2 cases of recurrent fracture of the penis have been reported in the medical literature.^{2,5} In both cases, the repeat fracture occurred at the previous fracture site. We present the first case of a second fracture, at a different site on the ipsilateral corpus cavernosum.

2. Case report

A 26 year-old man presented to us with a fracture of the penis, 23 days after the injury. At this time, repair was done of a fracture at the distal right corpus cavernosum, using 3 sutures of 3/0 polyglactin 910 (Vicryl™) (Fig. 1). This was reported as the first case of 'late delayed repair'.³ Twenty months later, he presented with a fracture of the ipsilateral corpus cavernosum at a more proximal site, nearer the base of the penis (Fig. 2). The injury occurred during coitus; however he was able to pass urine after the injury. The fracture site was easily identified by the 'rolling sign'.⁴ This was repaired via an incision at the penoscrotal junction which allowed the skin to be retracted distally to expose the haematoma deep to Bucks fascia (which produces the 'rolling sign') (Fig. 3). After evacuation of the haematoma, the 1.5 cm transverse rent in the corpus cavernosum was repaired using 3/0 vicryl. The penoscrotal incision provided good access to the fracture with no scar on the penis (Fig. 4). Three months post operatively, he has normal erections.

3. Discussion

In the largest study of 300 fractured penises, no case of refracture was documented.¹ In fact, only 2 cases of refracture have ever been reported in the medical literature and both occurred at the original fracture site.^{2,5} These refractures occurred at 2 and 9 years after the first injury and, in each case, had been repaired with absorbable sutures. In both cases, the authors recommended the



Fig. 1. Distal fracture of penis.

use of non-absorbable suture material for repair to minimize the risk of refracture. However, our case demonstrates that when vicryl is used, the scar at 20 months could withstand intracorporeal pressures that would result in fracture at another site on the same side. The argument that the routine use of non-absorbable sutures would decrease the risk of refracture needs to be reexamined, especially since this complication has occurred only twice.

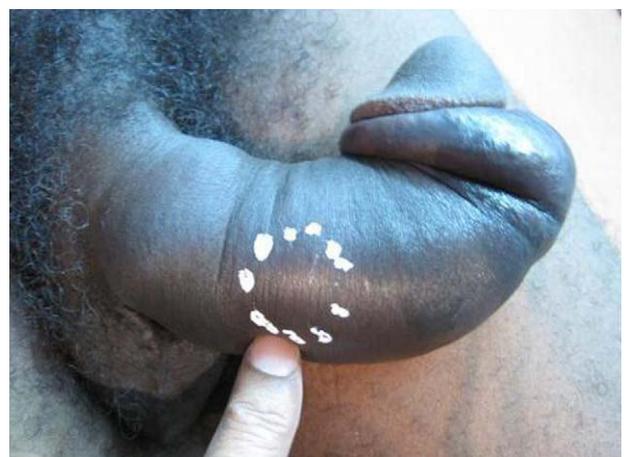


Fig. 2. More proximal fracture site (dotted white line demarcates haematoma) 20 months later.

* Corresponding author. Tel.: +1 868 662 4030; fax: +1 868 662 4030.
E-mail address: uwi.hariharan@gmail.com (S. Hariharan).



Fig. 3. Haematoma deep to Buck's fascia producing 'rolling sign'.



Fig. 4. Freely mobile penile skin allows good access to fracture via penoscrotal incision.

Moreover, because absorbable sutures were used, it would have been difficult to be certain that those refractures were at precisely the same site since no suture material would be present at 2 and 9 years postoperatively.

It is well documented that knots of non-absorbable sutures may be felt under the thin penile skin and could cause discomfort during sexual intercourse.² We agree with the viewpoint of Singh et al. that the routine use of non-absorbable suture for penile fracture repair may not be the best recommendation.⁶ The only 2 cases of refracture reported in the literature, occurred after routine use of absorbable sutures. There is no evidence to suggest that non-absorbable material would result in a lower fracture recurrence and, in fact, these sutures could produce more discomfort in the long-term.

References

1. El Etat R, Sfaxi M, Benslama MR, Amine D, Ayed M, Movelli SB, Chebil M, Zmeril S. Fracture of the penis: management and long-term results of surgical treatment. Experience in 300 cases. *J Trauma* 2008;64:121–5.
2. Kattan S, Youssef A, Onuora V, Patil M. Recurrent ipsilateral fracture of the penis. *Injury* 1993;24:685–6.
3. Naraynsingh V, Hariharan S, Goetz L, Dan D. Late delayed repair of fractured penis. *J Androl* 2010;31:231–3.
4. Naraynsingh V, Raju GC. Fracture of the penis. *Br J Surg* 1985;72:305–6.
5. Punekar SV, Kinne JS. Penile refracture. *Br J Urol Int* 1999;84:183–4.
6. Singh RB, Copal M, Dahiya RS. Recurrent ipsilateral fracture of the penis. *Injury* 1995;26:575.