

Conflict of interest

The authors declare no conflict of interest.

References

- 1 Alnadhari I, Abdelhaleem Abdeljaleel O, Sampige VRP, Abdulmuhsin A, Shamsodini A. Penile fracture: simultaneous complete urethral rupture with bilateral corpora cavernosa rupture. *Case Rep. Urol.* 2018; **2018**: 4929518.
- 2 Amer T, Wilson R, Chlosta P *et al.* Penile fracture: a meta-analysis. *Urol. Int.* 2016; **96**: 315–29.
- 3 Barros R, Silva M, Antonucci V, Schulze L, Koifman L, Favorito LA. Primary urethral reconstruction results in penile fracture. *Ann. R. Coll. Surg. Engl.* 2018; **100**: 21–5.
- 4 Batura D, Raza A, Mikhail M, Hashemzahi T, Figaszewska MJ. Penile fracture with bilateral corpus cavernosa tears and complete urethral disruption. *Int. Urol. Nephrol.* 2017; **49**: 1399–400.


- 5 Jagodic K, Erklavec M, Bizjak I, Poteko S, Korosec JH. A case of penile fracture with complete urethral disruption during sexual intercourse: a case report. *J. Med. Case Rep.* 2007; **2**: 14.
- 6 Kamdar C, Mooppan UM, Kim H, Gulmi FA. Penile fracture: preoperative evaluation and surgical technique for optimal patient outcome. *BJU Int.* 2008; **102**: 1640–4.
- 7 Mazaris EM, Livadas K, Chalikopoulos D, Bisas A, Deliveliotis C, Skolarikos A. Penile fractures: immediate surgical approach with a midline ventral incision. *BJU Int.* 2009; **104**: 520–3.
- 8 Moslemi MK. Evaluation of epidemiology, concomitant urethral disruption and seasonal variation of penile fracture: a report of 86 cases. *Can. Urol. Assoc. J.* 2013; **7**: E572–E575.
- 9 Wong NC, Dason S, Bansal RK, Davies TO, Braga LH. Can it wait? A systematic review of immediate vs. delayed surgical repair of penile fractures. *Can. Urol. Assoc. J.* 2017; **11**: 53–60.
- 10 Raheem AA, El-Tatawy H, Eissa A, Elbahnasy AH, Elbendary M. Urinary and sexual functions after surgical treatment of penile fracture concomitant with complete urethral disruption. *Arch. Ital. Urol. Androl.* 2014; **86**: 15–9.

Editorial Comment

Editorial Comment to Tri-tubular penile fracture: A case of complete rupture of urethra and bilateral corpus cavernosa

Penile fracture is a rare urological trauma caused by high-energy blunt penile injury, such as striking a female partner's perineum during sexual intercourse, accompanied by the rupture of the tunica albuginea of the corpora cavernosa.¹ Patients often notice a rupture sound immediately after the injury, followed by rapid pain and penile deformation. Approximately two-thirds of penile fractures occur on the proximal part of the penis (the so-called penoscrotal junction), and 80% of ruptures are on the ventral side.² A recent systematic review reported that bilateral rupture of the tunica albuginea of the corpus cavernosum occurs in 5–26% of penile fractures and is accompanied by urethral injury in 15% of the cases.² In addition, the rupture of the bilateral penile cavernous tunica albuginea is more likely to be associated with urethral injury.³ Young *et al.* reported a case of complete rupture of the urethra and bilateral corpus cavernosa, which could be the most severe type of penile fracture.⁴ The gold standard management for penile fractures is immediate surgical repair.² The ruptured tunica should be closed with interrupted absorbable sutures via circumcising or a penoscrotal midline incision. An accompanying urethral injury should also be repaired immediately by tension-free anastomotic urethroplasty, which is a common procedure for short bulbar urethral strictures.² The case of a tri-tubular penile fracture presented here was treated successfully by immediate reconstruction and achieved an excellent functional outcome.

This case report suggests an ideal treatment for a severe penile fracture, and general urologists should be aware of this treatment strategy.

Akio Horiguchi M.D., Ph.D. 

Department of Urology, National Defense Medical College,
Saitama, Japan
impreza@ndmc.ac.jp

DOI: 10.1002/iju5.12269

Conflict of interest

The author declares no conflict of interest.

References

- 1 Cavalcanti AG, Krambeck R, Araujo A, Rabelo PH, Carvalho JP, Favorito LA. Management of urethral lesions in penile blunt trauma. *Int. J. Urol.* 2006; **13**: 1218–20.
- 2 Falcone M, Garaffa G, Castiglione F, Ralph DJ. Current management of penile fracture: an up-to-date systematic review. *Sex. Med. Rev.* 2018; **6**: 253–60.
- 3 Koifman L, Barros R, Junior RA, Cavalcanti AG, Favorito LA. Penile fracture: diagnosis, treatment and outcomes of 150 patients. *Urology* 2010; **76**: 1488–92.
- 4 Young E, Ashrafi AN, Kahokehr AA. Tri-tubular penile fracture: a case of complete rupture of urethra and bilateral corpus cavernosa. *IJU Case Rep.* 2021; **4**: 143–5.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.