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# LETTER TO EDITOR ABOUT:

## Penile Fracture: Penoscrotal approach with degloving of penis after Magnetic Resonance Imaging (MRI)

We read with interest the paper "Penile Fracture: Penoscrotal approach with degloving of penis after Magnetic Resonance Imaging (MRI)" by Antonini et al. in your journal (2014; 86(1) 39-40). The statement "early surgical exploration is paramount" does not take into consideration the excellent results reported for delayed repair of the fracture (1). Delayed repair also makes clinical identification of the fracture site more accurate since, when the acute swelling settles, the rolling sign (caused by clot at the torn cavernosum) becomes even more obvious. This is even more evident in late delayed repair (2). The authors correctly point out that "degloving a bruised edematous penis can be quite challenging" especially since most fractures are in the proximal shaft. The peno scrotal incision is also easier to perform in a delayed repair as much of the swelling and deformity are reduced. Thus, we believe that in most cases, the fracture site can be accurately identified by the rolling sign on presentation (3). If, however, this is not evident, a delay of 7-12 days makes accurate identification and repair via a penoscrotal incision much easier (1). Thus, we do not share the view that "MRI should be the first choice modality of investigation" since it is both costly and unnecessary. It should be reserved for cases of suspected urethral rupture, bilateral cavernosal injury or doubtful diagnosis.

#### **REFERENCES**

- 1. Nasser TA, Mostafa T. Delayed surgical repair of penile fracture under local anesthesia. J Sex Med. 2008; 5:2464-9.
- 2. Naraynsingh V, Hariharan S, Goetz L, Dan D. Late delayed repair of fractured penis. J Androl. 2010; 31:231-3.
- 3. Naraynsingh V, Raju GC. Fracture of the penis. Br J Surg. 1985; 72:305-6.

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## REPLY BY AUTHORS

Magnetic resonance imaging (MRI) scan of the penis is highly sensitive at detecting the exact location of the tunical tear and allows the surgeon to chose the best surgical approach.

As 2/3 of fractures occur all the way down on the proximal aspect of the shaft, a complete degloving becomes an unnecessary procedure, as a penoscrotal approach would guarantee adequate exposure in these patients (1-4).

Magnetic resonance imaging or USS of the penis play therefore a pivotal role for the identification of the exact location of the tear and therefore allow the surgeon to adequately choose the most appropriate surgical approach.

Surgery should be immediate, in order to preserve as much cavernosal tissue as possible and to minimize the formation of corporeal fibrosis, which would lead to ED, penile shortening and curvature (5-7).

When readily available, MRI should be the first choice modality of investigation due to its superior sensitivity in detecting tunical injuries (8).

#### **REFERENCES**

- 1. Ozcan S, Akpinar E. Diagnosis of penile fracture in primary care: A case report. Cases J. 2009; 2:8065.
- 2. Kowalczyk J, Athens A, Grimaldi A. Penile fracture: An unusual presentation with lacerations of bilateral corpora cavernosa and partial disruption of the urethra. Urology. 1994; 44:599-601.
- 3. Dever DP, Saraf PG, Catanese RP, Feinstein MJ, Davis RS. Penile fracture: Operative management and cavernosography. Urology. 1983; 22:394-6
- 4. Srinivas BV, Vasan SS, Mohammed S. A case of penile fracture at the crura of the penis witout urethral involvement. Indian J Urol. 2012; 28:335-337.
- 5. Garaffa G, Raheem AA, Ralph DJ. Penile fracture and penile reconstruction. Curr Urol Rep. 2011; 12:427-31.
- 6. Sharma MB, Singh TS, Khumucham S, Chito T, Sharma BB. Fracture of the penis report of seven cases. J Indian Med Assoc. 2011; 109:45-6.
- 7. Hatzichristodoulou G, Dorstewitz A, Gschwend JE, Herkommer, Zantl N. Surgical management of penile fracture and long-term outcome on erectile and voiding. J Sex Med. 2013; 10:1424-30.
- 8. Agarwal MM, Singh SK, Sharma DK, et al. Fracture of the penis: a radiological or clinical diagnosis? A case series and literature review. Can J Urol. 2009; 16:4568-4575.

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