Isolated anterior urethral trauma in man after coitus: a case report

Trauma isolado de uretra anterior masculina após coito: relato de caso

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ABSTRACT
Penile fracture with or without urethral injury after coitus presents with severe pain and immediate penile detumescence accompanied by a cracking sound. Hematuria or voiding difficulty are common findings and suggest associated urethral injury. The objective of this report is to describe an unusual complication of coital trauma diagnosed based on clinical findings. The isolated urethral injury is rare but is one of the causes of male coital trauma and may be suspected when patients present urethral bleeding.

Keywords: Urethra/injuries; Coitus; Case reports

RESUMO
Fratura de pênis com ou sem lesão de uretra é a principal lesão ocorrida durante o ato sexual e se apresenta com dor intensa, rápido intumescimento e estalido. Hematuria ou dificuldade miccional são sintomas inumuns, que sugerem lesão de uretra associada. O objetivo do trabalho foi relatar essa rara complicação de lesão isolada de uretra durante o intercurso sexual cujo diagnóstico se acha baseado em achados clínicos. A lesão isolada de uretra, embora rara, pode ocorrer durante o intercurso sexual e deve ser suspeitada na presença de uretrorrágia.

Descritores: Uretra/lesões; Coito; Relatos de casos

INTRODUCTION
Penile fracture with or without urethral injury is the most common lesion that occurs during sexual intercourse. It is presented with a snapping sound associated with severe pain and rapid detumescence(1,2).

Gross hematuria or difficulty when voiding are uncommon symptoms but, if present, suggest associated urethral injury. On inspection, the penis is tender, swollen and bruised³. Penis deviation away from the injury side can also be observed⁴. Penile fracture is defined as rupture of the corpus cavernosum due to blunt trauma to the erect penis and diagnosis is usually made based on clinical findings³,⁴.

Urethral injury is associated with penile fracture in 2 to 20% of cases³ and it is usually partial, but complete rupture has been reported⁵.

Retrograde urethrography should be performed if urinalysis reveals blood, or when signs or symptoms of urethral injury are present. However, urethrography is not 100% sensitive and some false negative results may be observed. Other imaging examinations can be ordered but must not replace clinical assessment and exploration⁶.

If diagnosis of penile fracture is uncertain, cavernosography and ultrasound may be required⁶,⁷. Magnetic resonance imaging (MRI) can give excellent images of the penile injury, but difficulty in performing MRI should not delay treatment⁸.

Isolated urethral injury is very rare and might occur with absence of a snapping sound, sharp pain and detumescence⁹.

CASE REPORT
A 23-year-old man was referred to hospital following a penile injury sustained five hours before. He described...
having sexual intercourse in the reverse position (female superior position) when, on attempting penetration, his penis bent sharply against his partner’s thigh and he noticed urethral bleeding and hematuria. There was no cracking sound or penile pain, swelling or immediate detumescence. On examination, the patient had not tender or swollen penis (Figure 1). His bladder was impalpable and urethral bleeding observed. Palpation of the penis was painless. Urethrography showed a partial anterior urethra injury in the medial portion of the penis (Figure 2). The ultrasound showed small hematoma of the corpus spongiosum around the urethral injury and absence of hematoma of corpus cavernosum. The patient was treated with vesical catheter 16 Fr for 10 days, and was discharged after 48 hours, with advice to refrain from sexual activity for 6 weeks. A new urethrography showed absence of contrast leakage and normal urethra without stricture.

**DISCUSSION**
Male coital injuries are often caused by unusual sexual practices or positions, such as female superior position (reverse). During sexual intercourse, urethral injury can occur since the urethra is on the ventral side of the penis, which is between the male hard erection of the corpora and the pubic symphysis or perineum of the woman\(^9\).

Mohapatra reported three cases of isolated urethral injury during reverse coitus and all patients complained of severe pain, urethral bleeding and immediate detumescence. All lesions occurred in the fossa navicularis, and bleeding stopped with manual penis pressure. Although rare, isolated urethral injury is one of the causes of male coital trauma, which may present without the typical features of penile fracture\(^9\).

Cheng et al. reported the case of a 29-year-old man who was presented with a three-year history of hematospermia and post-coital gross hematuria. An isolated urethral injury with active bleeding was detected during urethroscopy, and the patient was treated with transurethral fulguration. The authors recommend urethroscopy when the penis is tumescent as a useful diagnostic modality for male coital trauma. Transurethral fulguration, short-term oral estrogen and abstinence are adequate treatment for this unique coital-related injury. The posterior urethra, as well as the fossa navicularis, are possibly vulnerable sites\(^10\).

**CONCLUSION**
The diagnosis of penile fracture is based on clinical findings. Isolated urethral injury is rare, but is one of the causes of male coital trauma and may be suspected when the patient presents with urethral bleeding.

**REFERENCES**


