Penile strangulation by multiple steel ball bearings: desperate situation-desperate measures

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DESCRIPTION

A 33-year-old male patient was referred with progressive penile pain and swelling following history of self-placement of two industrial steel ball bearings for sexual gratification about 2 weeks back. The patient denied any history of trauma, insect bite, drug abuse and was dribbling urine, was sexually active and his history was unremarkable. Local examination revealed an engorged tender penis with two steel ball bearings strangulating the root of penis with pressure necrosis exfoliation/pregangrene of penile skin (figure 1A). The blood biochemistry/urine reports were within normal limits and corporal blood gas analysis (pO_2 25 mm Hg, pCO_2 65 mm Hg, pH 7.18) confirmed local ischaemia. Despite multiple attempts at corporal injections/aspirations (diluted norepinephrine), intermittent penile pneumatic pressure cuff inflation (<80 mm Hg), Gigli wires and modified strings, the same could not be removed. Due to risk of penile gangrene (under anaesthesia, aseptic precautions/ensuring site safety/necessary safeguards and consent) after stabilisation of rings with an Allis forceps and countersupport with BP handle (figure 1B) we resorted to desperate measure of cutting the steel rings with a motorised electric ring (professional industrial marble cutting tool) BoschGDC120 under chilled saline drip for penile cooling (figure 1C). The chilled saline drip (lowered temperature to about 20°C that helped in reducing collateral thermal damage) and the rings were extricated successfully in 15 min (figure 1D) and the patient was catheterised uneventfully. The swelling was considerably reduced after 2 days and the patient was discharged on Foley catheter after 1 week. On second week follow-up the patient was potent and developed urethrocutaneous fistula (UCF). He admits that he still experiences nocturnal penile tumescence and early morning erections. The patient is currently undergoing psychiatric counselling and treatment for UCF. Penile strangulation by steel ball bearings can occur uncommonly secondary to their placement for sexual gratification.[1–3] If left untreated they have the potential to cause penile gangrene, urethral injury and erectile dysfunction.[1] The management of penile strangulation injuries comprises urgent penile decompression to prevent penile necrosis.[1] To ensure penile salvage in desperate situations where conventional measures fail there is compulsion to use desperate measures that may be unconventional and are difficult to avoid.[1 3] If the urethra appears intact a per-urethral catheter may be placed else a suprapubic catheter may be placed for an uninhibited micturition.[4] We do not promote the unauthorised use of any equipment/device/therapy and advocate the reader to exercise judicious care, extreme caution, follow all necessary procedures, training, credentialing and laws on the subject concerned as prevalent in the country of origin.

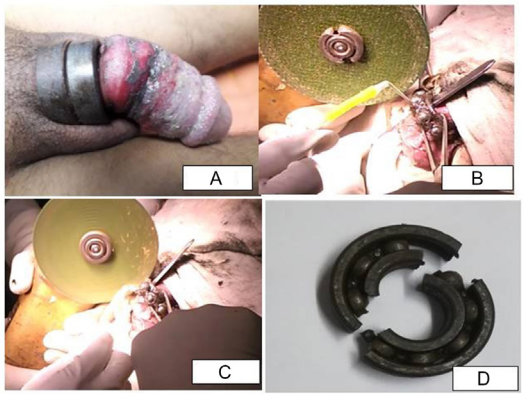

Figure 1 (A) Clinical image showing an engorged tender penis with two steel ball bearings strangulating the root of penis with pressure necrosis exfoliation/pregangrene of penile skin. (B, C) Clinical image showing cutting the rings with motorised industrial tool. (D) Clinical image showing retrieved ball bearings.

Learning points

- Strangulation of penis is an uncommon situation due to self-placement of a wide variety of strangulating objects for sexual gratification. Penile strangulation by multiple constricting metallic rings may lead to penile gangrene/necrosis/urethral injury/fistula and erectile dysfunction.
- Steel ball bearings encircling penis that cannot be removed may need cutting (with Gigli wire or motorised tools) to preserve penile function and prevent urethral injury.

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