INTRODUCTION
Penile strangulation due to any solid encircling ornament or metal is rarely reported. Venous outflow obstruction due to any constricting item around the shaft leads to venous congestion, urinary obstruction, and rarely gangrene of the penile shaft skin. We report a case presenting with penile near-strangulation due to iron-lead metallic junction pipe which was cut using a heavy electric metal cutter.

CASE REPORT
A 77-year male presented in accidental emergency (AE) department with a wrought iron pipe junction with internal circular threads (Figure 1), commonly used for domestic water supply installations, tightly stuck at the base of the penile shaft with marked edema of the distal shaft.

The pipe was used by the patient for erectile dysfunction regularly but failed to remove it 15 days ago. Patient did not seek medical help due to social reasons. He used warm oil lubrication and near-boiling water trying to loosen the metallic tube resulting in macerated skin with pre-gangrenous changes. Patient complained of difficulty in micturition. The plastic pipe or the string methods to reduce the swelling failed. Bolt cutters and electric pneumatic saw were either too large or not strong enough to cut through the metallic pipe.

DISCUSSION
Penile strangulation due to constricting objects is being reported most commonly in patients with erectile dysfunction and to improve sexual interest. The patient may present with simple edema to complete necrosis of the penile skin and shaft. Ivanoski et al. discussed the causes, presentation, pathophysiology methods employed as well as the complications of cases with penile strangulation comprehensively. Time of presentation reported for acute strangulation varies greatly from few hours to a month.
Penile shaft strangulation with wrought iron metallic pipe

Common reported metallic objects are rings, hammer heads, nuts, metal hoops, metallic axletree, metallic and rubber objects. Penile injuries have been graded by Bhat et al. into five grades, based on severity of the injury. This case was grade II of the classification (injury to the skin and corpus spongiosum but no urethral injury or fistula formation).

Common methods employed for removal of metallic objects are lubricants, manual milking, subcutaneous or glandular puncture following by silk/plastic drip set winding method. However, literature supports that cutting of metallic structures is difficult to manage with ring cutter, metal saw, cutting tang, Dremel Moto-Tool kit, Anspach cement eater or high speed drills. An electric-run metallic cutter has been previously reported to cut a 2 x 0.8 cm hard metallic nut. The metallic ring was cut at 10 and 2 o'clock positions in this report.

Removal of these tightly fitted metallic objects has been reported to result in skin necrosis, local burn as well as urethral injuries. Postoperative, painless micturition is an indication of normal urinary tract. Delayed urethral strictures may present with the condition. Urethral fistula after such cases requires delayed reconstruction along with skin grafting.

The choice of procedure for acute penile strangulation depends on a number of factors including material, size, shape and position of strangulating object, grade of injury, age and neurological status of the patient, and availability of appropriate gadget and expertise.

This case was difficult to manage since the metallic joint was 4 x 4 x 0.5 cm with internal striations. The use of electric cutter by an expert was sought due to competency mastered by a blacksmith rather than a general surgeon. Emergency services training program should be extended in our local setting to cater to any situation as encountered in this study.

The case highlights a difficult scenario, especially in our local setup. Patients present late due to social reasons; however, the surgeons in emergency department must be aware of all the possible treatment options for a successful outcome.

REFERENCES