PUB: 53/2012

BURN FISTULAS- A CASE REPORT

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Abstract

We present an unusual case of hot metal rod penetration through anterior aspect of the right thigh near femoral triangle and exited posteriorly through the right buttock leading to burn fistula. The case is presented because of rarity of hot rod penetrating the thigh and subsequent anxiety for the surgeon in keeping an eye over the femoral vessels and restoring the function of the limb.

Keywords: Burn fistula, penetrating injury, wound debridement, reconstructive surgery

1. Case Report

A 30 year old male presented with a hot metal rod stuck into his right inner thigh, while working during night shift in a metal roller mill.

The rod had penetrated through and through the anterior aspect of the right thigh near femoral triangle and had exited posteriorly through the right buttock leading to BURN FISTULA. (Figure 1,1A)

Figure 1- Shows site of burn fistula (anterior)

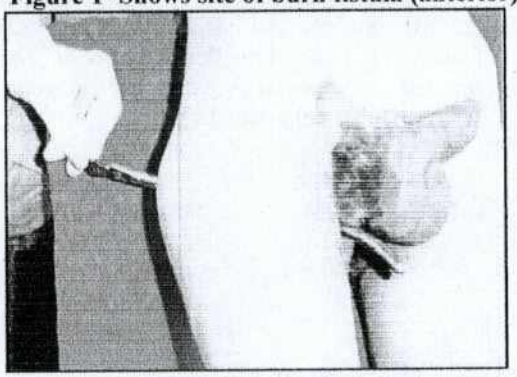
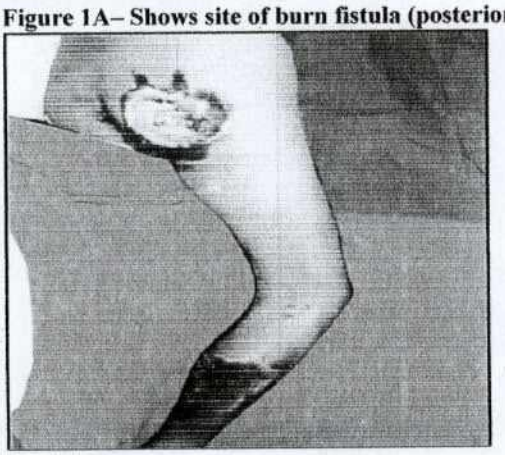


Figure 1A– Shows site of burn fistula (posterior)



He was in state of shock. There was profuse bleeding from both the entry and exit wounds.

There was superficial to deep burns around the entry, exit wounds, posterior aspect of the lower leg, palmar aspect of the left hand, penile and scrotal skin.

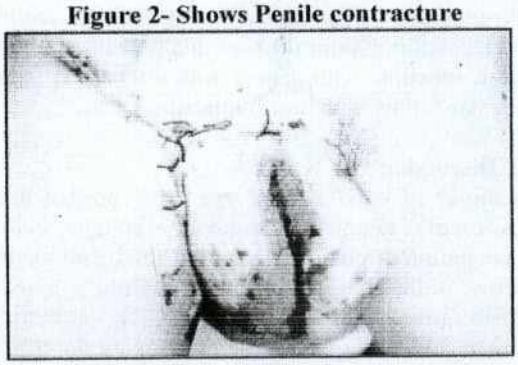
The patient was resuscitated and immediately taken for emergency wound exploration. Blood transfusion was kept ready.

Wound was examined thoroughly and hemostasis was achieved by ligation of branches of bleeding femoral veins. Femoral artery was seen intact and pulsating through the wound. Integrity of vessels and nerves was confirmed and appropriate debridement and wound toilet with normal saline was given.

Post debridement, an eye was kept over the femoral artery as it can blow up and causes torrential hemorrhage and death.

Subsequently, Patient had developed penile contracture. (Figure 2)

Figure 2- Shows Penile contracture



Later patient underwent reconstructive surgery, in the form of gluteus maximus VY plasty[1] with split skin grafting over the gluteal region.

Anteriorly wound debridement with scrotal flap cover was done.

Contracture of the penis was released and double Z plasty[2,3] with skin grafting was done. (Figure 3, 3A)

Figure 3- Shows post plastic and reconstructive procedure

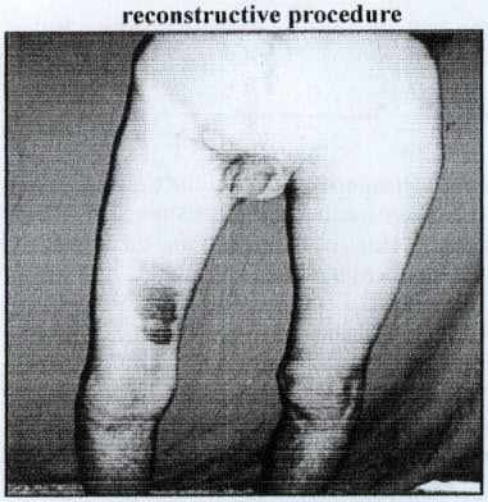
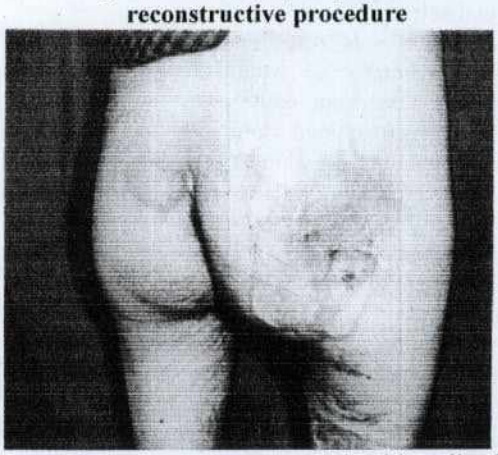


Figure 3A- Shows post plastic and reconstructive procedure



Other raw areas were covered with split skin grafts.

Postoperatively patient's recovery was uneventful and condition improved gradually with normal limb function. The patient was discharged with regular follow with no complications.

2. Discussion

Yang *et al* [4] and Bajracharya *et al*[5] presented a case of traumatic bamboo foreign body penetration through the posterior thigh and metal arrow in the iron fence penetration into popliteal fossa respectively. Above case is presented because of rarity of hot rod penetrating the thigh and subsequent anxiety for the surgeon in keeping an eye over the femoral vessels and restoring the function of the limb.

Conclusion

Penetrating injuries may be grotesque appearing and need not be fatal since integrity of great vessels cannot be breached easily.

Timely wound debridement and excision of contaminated or avascular tissue, along with prevention of sepsis, are crucial to managing extremity injury. Late reconstruction and functional results are very challenging for the surgical team to achieve.

References

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