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Bullgore Injury: A Case Report

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ABSTRACT

Animal related injuries are frequently reported in countries where bulls are used for sporting events as well as in places where farming and live stock rearing is practiced. In rural areas of India it is commonly seen in "Karahunnime" similar to Jallikattu event of taming bulls. Injuries, minor to fatal are caused by bull gores. The mechanics of bull goring are unique and often misleading and thence, they deserve reporting. Hence we are reporting an unusual case with a bull gore injury, who presented with haemothorax and multiple goring injuries.

Key words: Bull gore, Animal injuries, Haemothorax

INTRODUCTION

Animal related deaths, specially by bulls are widespread in western countries where they are used for sporting events as well as in india, where agricultural and livestock rearing is practiced.¹

Injuries caused by animals are related to

ecological structure as well as socio-cultural and socioeconomic properties of the society. In India, it is commonly seen in the "Jallikattu" event of taming bulls, organized as part of Pongal in Tamil Nadu. Despite being normally docile, bulls are the most aggressive and dangerous animals. Bulls

can become quite angry for no apparent reasons and make a turn for the worse. Injuries, minor to serious are caused by bull gores.^{1,2}

Recent tragedies in bull riding have highlighted the need for prospective epidemiologic investigation of injury patterns and the mechanics of bull goring are unique and often misleading and thence, they deserve reporting. Hence we are reporting an unusual case with a bull gore injury, who presented with haemothorax and multiple goring injuries.

CASE REPORT

History of confrontation of a man 55yr old and bull took place in the evening hours while running with bull on 24/06/2013 and sustained injuries on the body. Immediately he was admitted to private hospital and treatment was initiated. There he was succumbed to injuries with in 1 hour of an incident. Body shifted to the mortuary of Raichur institute of medical sciences, Raichur for autopsy.

Autopsy Findings

External examination: Dead body of a male deceased aged 55 years, measuring 168cms in length, and was moderately built and nourished. Hospital cotton bandage present over left thigh region. Postmortem staining present over dependent back region of the body. Rigor mortis present in both upper and lower limbs. The injuries noted are Multiple reddish brown contused abrasions over left side of face, front of chest, left side lower abdomen and feet region (of variable sizes 3x2cm to 5x3cm). A lacerated wound over right side of chest measuring 8x5x1 cm.

Multiple lacerated wound over front and back of left thigh, front of right thigh region (varying size from 5 x 3 x 2 cm to 8 x 5 x 2 cm). A lacerated wound over right buttock region measuring 6 x 4 x 1 cm.

Internal examination: Head shows sub-scalpal heamatoma. There was about 700ml of fluid and clotted blood in the thoracic cavity. In the chest, extravasation of blood noted along 3rd to 9th intercostal space with fracture of ribs on both sides with underlying contused lacerations of both the lungs.

Based on the history and post mortem findings, cause of death was opined as haemorrhage and shock as a result of bull gore injury leading to cardio-respiratory failure.

DISCUSSION

Despite being quiet bull can easily become raged. Injuries may be sustained from the horns of these animals, either unintentionally or as a result of an attack, more so as in sports show.³ Many studies stressed that bulls account for 25% of animal related injuries and 3% of these die from associated injuries.⁴ The pattern of injury seems to vary at different places. Pelvic-abdominal bull horn injuries are serious lesions with a high mortality rate due to bleeding. In India, pelvic-abdominal injuries followed by chest injuries predominate in contradiction to those in the Latin countries, where lower extremity injuries are more common.^{3,4 & 5}

Bull horn injuries of the chest and extremities have been reported during bull racing or bull fighting or in a rural set up, where people live in

close association with cattle.^{2, 6} Blunt impact of considerable nature on the chest can give rise to alternate compression and decompression of the chest. This leads to initial congestion followed by laceration and haemorrhage due to rupture of lung alveoli.² Atri and Mehdiratta in a study of 154 civilian chest injuries reported six cases from bullhorns with three cases of right and left side each constituting about 4%. According to other researchers and the present study chest injuries are in the form of multiple rib fractures, haemothorax and contused lacerations involving lungs.⁷

The mechanisms of bull gore injuries are distinctive and they have been well reviewed by Mark Sheldon.⁸ The bulls gore the offender through an upward and a lateral angulation, with the path of incursion following an arc. The tearing injuries are accredited to the strong neck muscles of the animal. The victims entire body weight may be lifted up. Pattern of injury depends on height of the victim, height of the bull and relative position. When the animal tries to unlock its horn, the victims weight additionally acting in the opposite direction predisposes to repeat incursion, and possibly multiple tracks. Multiple entry wounds have also been reported.⁴ The rotational or curved movements make the deep injuries rare, as the skin of the abdomen and the perineum are divergent to the arc of the gore.

RECOMMENDATIONS

- Stringent law measures
- wearing helmets and steel-toed boots as a simple and important safety strategy to prevent bull gore injuries.

- Aggressive or difficult bulls should never be allowed to run
- Dehorning of the bull

CONCLUSION

Bull horn injuries though a common occurrence, injuries to the chest and extremities are rare entities which mostly occur in a rural setup, especially in India. These cases mandate reporting due to severity at presentation and are associated with torrential bleeding and more likely to result in death.



Fig.1: Lacerated wound over right side of chest



Fig.2: Multiple lacerations over left thigh

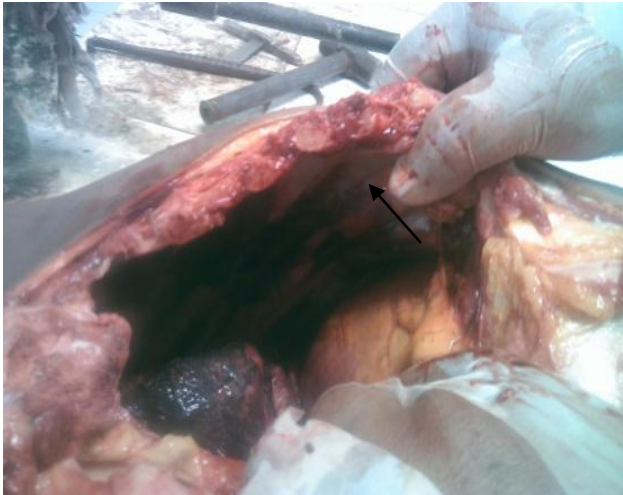


Fig.3: Contusion over Intercostal spaces with rib fractures



Fig.4: Contused lacerations of Lung

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