

Evisceration of Small Intestine through Thigh Due to Bull Gore Injury - A Rare Case

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Abstract

Bull horn injuries are common injuries in the rural population¹. These types of injuries are seen in farmers who take care of the cattle. Generally the injuries are seen in the perineal area and lower abdomen². I am reporting a rare case where there was a penetrating injury in the right thigh extending into the peritoneal cavity with evisceration of small intestine through the thigh.

Keywords: Bull Gore Injury, Evisceration of Small Intestine through the Thigh

1. Introduction

Bull gore injuries are among the commonest accidents in rural India, where people make their living rearing the livestock². In Spain Bull horn injuries are a common sport injury in bullfighting¹. The injuries thus sustained may be penetrating injuries to the lower abdomen and perineum, blunt injuries to the chest, abdomen and spine. The injuries predominantly occur on the right side of the abdomen^{1,3}.

The shape and size of horns of bulls, cows and buffaloes are different thus producing wounds of different size and depth but are goring in nature. Lower abdomen and perineum are commonly involved. Mostly the injuries extend only up to the subcutaneous tissues and muscles but if the force is more the injuries may extend into body cavities. Injuries in the perineal region are a great challenge in management because of the complex anatomy of this area⁴.

2. Case Report

A 55-year-old male farmer came with a history of bull gore injury. While tying the bull became violent. He sustained a penetrating injury to the right thigh. When brought to the hospital, loops of small intestine were coming out through the wound in the right thigh. There were no other injuries (Figure 1).



Figure 1. Bull gore injury in the right thigh with evisceration of small intestine through the thigh.

The patient was resuscitated. The loops of small intestine were washed with normal saline and covered with sterile mops. Laparotomy was done. Abdomen opened by

midline incision. Abdomen was thoroughly inspected. The tract of the penetrating injury was just below the inguinal ligament. The loops of terminal ileum were found herniating through the tract. Because of the oedema of the loops of intestine, it was not possible to reduce the loops into the abdomen. Incision was taken below and lateral to the inguinal ligament. The penetrating tract widened and the loops were deposited into the abdomen. Rent in the peritoneum was closed. The abdomen was thoroughly explored for any other injury. No other injury was found. Thorough peritoneal lavage was given and the abdomen was closed.

Post operative course was uneventful. The patient went home on 12 th post operative day.

3. Discussion

In India bull gore injuries are commonly seen in rural areas¹. Pola is a festival in Maharashtra where farmers decorate the Bull and worship them. Bull gore injuries are more common in this festival. In many part of Maharashtra races of bullock carts are still arranged during festival season. Jallikatta is a traditional bull-taming sport played in Tamil Nadu as a part of Pongal celebration Mattu Pongal day. In France Bullfight dates back to 13th century. Spanish style bullfighting is called *corrida de toros* (literally running of bulls)⁵.

Dogan and colleague had conducted a study in the persons involved in animal husbandary⁶. They concluded that bulls are most dangerous of all animals. In a servellilance study of agricultural industry, Casey and colleagues stressed that although cows greatly outnumber bulls in dairy farm, bulls account for 25% of the animal related injury that are more severe in nature⁷.

The horns of the bulls are long, curved and may be sharp. The wounds due to bull born injury may be contusions, laceration or penetrating wounds. There may be fractures. Goring is taken when the bull horns penetrate into the muscles or body cavities⁷. Goring is also described as a single injury which includes a mix of lacerated wound, contusion and infection by many researchers.

The pattern of injury depends on many factors like height of the victim, height of the bull, relative position of the anima at the time of attack. The injury occurs commonly in the lower abdomen and perineum. In the abdomen the horns may penetrate into subcutaneous tissue, muscle¹⁻⁶. If the force is more peritoneum may be punctured. The head bull is at the level of abdomen, hence abdominal injuries are common. The bony shield of the

thorax protects the chest from penetrating injuries³.

In most of the studies, injuries are more common on the right side of the victim^{1,3}. The obvious explanation could be that the victim sustained injuries while rearing the animal, during feeding, tying to the poles, putting ropes round the neck and tying to the bullock-cart. During these manouevres, the right side of body is exposed to the tip of the horn when the animal suddenly moves its head. Moreover, most of the people are right handed and the animal stands on the right side and hence the tip or body of the horn is in close association with the right side of the body. Other possible explanation could be that the victim may turn the right side of the body towards the animal protecting himself by using right arm in self-defense.

The perineum is commonly involved in these types of injuries. This can be because of complex anatomy of the perineum which allows the horn to easily hook and penetrate². We have observed that the most common injury in our region is srotal laceration. Testes because of their mobility are not injured.

One case of evisceration of small intestine through the femoral triangle is reported by Shashirekha et al⁸.

In our case there was a laceration on the right thigh. There was a long penetrating wound in the subcutaneous tissue extending in the peritoneal cavity with herniation of small intestine through the thigh. There was no injury to the small intestine. This can be because of the blunt shape of the horn. Such type of injury is not reported in the literature. The patient was managing successfully doing urgent laparotomy.

4. Conclusion

The wounds due to bull horn may be more extensive then they appear. Wounds in the inguinal area, scrotum or even thigh may have extension in the peritoneal cavity. Hence should be thoroughly explored and managed accordingly.

5. References

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