NEW ERA AGRICULTURE MAGAZINE

# SURGICAL MANAGEMENT OF INTESTINAL EVISCERATION IN A COW

M. Vigneswari*, S. Tina Roshini, N. Gurunathan, and N. Aruljothi

**Abstract**

A 3 years old female CBJ cow was presented with the history of gore injury. On clinical examination intestinal evisceration was noticed on the inguinal region of the ventral side of abdomen near the udder. Sedation was achieved using inj. Xylazine @ 0.1 mg/kg body weight I/M and 10 ml of 2% lignocaine hydrochloride was infiltrated around the surgical site. Under aseptic condition wound was extended cranially. Eviscerated intestinal loops were flushed with normal saline and metrinidazole solution and the contents were pushed back inside the abdominal cavity. Abdominal muscles were sutured using simple interrupted suture pattern with catgut size 2. Subcutaneous were closed by simple continuous suture pattern using catgut size 2. Skin was apposed by horizontal mattress suture pattern using silk cotton size 1 and stent gauze was applied. Post operatively Inj. streptopenicillin @10mg/kg bwt for 5 days, inj. meloxicam @ 0.5mg/kg bwt for 3 days, inj. chlorpheniramine maleate @ 0.5mg/kg bwt for 5 days intramuscularly, respectively. Sutures were removed on 10$^{th}$ post-operative day and animal made uneventful recovery.

**Keywords**: Cow, barbed wire, intestinal evisceration

## Introduction:

Acquired intestinal evisceration is the protrusion of the viscera through a defect in the body wall, secondary to trauma or as a postoperative complication with mortality rates ranging from 18 to 36% has frequently been reported in humans (Keill *et al.*, 1973; Madsen *et al.*, 1992; Cigdem *et al.*, 2006). In domestic animal, acquired evisceration is generally caused by direct trauma, gore injury, fencing wire, penetrating foreign bodies (Smeak, 2003) or wound dehiscence.

Abdominal evisceration injuries could lead to devastating injuries (Sara *et al.*, 2009). Regardless of the inciting cause, exposure and contamination of the abdominal viscera warrants immediate surgical intervention (Smeak, 2003). However, those apparently caused by direct trauma, gore injury, wound dehiscence, or due to penetrating foreign bodies in clinical practice are unusual (William *et al.*, 2011). Thus, the present case report describes about the successful surgical management of intestinal evisceration due to

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gore injury in a cow.

**Case History and Observation**

A 3 years old female CBJ cow was presented to DVSR, VCC, RIVER, Puducherry with the history of gore injury. On clinical examination intestinal evisceration was noticed on the inguinal region of the ventral side of abdomen near the udder (**Fig 1**).

**Fig 1:** Intestinal evisceration was noticed on the ventral side of abdomen near the udder

**Treatment and Discussion**

Sedation was achieved using inj. Xylazine @ 0.1 mg/kg body weight I/M and 10 ml of 2% lignocaine hydrochloride was infiltrated around the surgical site. Under aseptic condition wound was extended cranially. Eviscerated intestinal loops were flushed with normal saline and metrinidazole solution and the contents were pushed back inside the abdominal cavity (**Fig 2**). Abdominal muscles were sutured using simple interrupted suture pattern with catgut size 2. Subcutaneous were closed by simple continuous suture pattern using catgut size 2. Skin was apposed by horizontal mattress suture pattern using silk cotton size 1 and stent gauze was applied. Post operatively Inj. streptopenicillin @10mg/kg bwt for 5 days, inj. meloxicam @ 0.5mg/kg bwt for 3 days, inj. chlorpheniramine maleate @ 0.5mg/kg bwt for 5 days intramuscularly, respectively. Sutures were removed on 10$^{th}$ post-operative day and animal made uneventful recovery.

According to William *et al.,* 2011, preoperative treatment include hemodynamic stabilization, antimicrobial treatment and extension of abdominal rent to prevent vascular compromise of eviscerated organs, and application of a sterile dressing until surgical intervention enhances successful recovery without any complications. In our study, the case was presented without undue delay and with minimal tissue damage and contamination. Surgical intervention was carried out by routine abdominal wall closure after proper lavage and intestinal loops were repositioned into the abdominal cavity. Postoperative complications such as wound

**Fig 2:** Eviscerated intestinal loops were repositioned into the abdominal cavity and sutured

dehiscence, seroma formation were not encountered in our study. Thus, the present case was successfully managed without any postoperative complications and an animal made an uneventful recovery.

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