



SURGICAL MANAGEMENT OF INTESTINAL EVISCERATION DUE TO DOG BITE IN PREGNANT FEMALE CAT

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ABSTRACT

A three years old female pregnant cat weighing 6 kg. was presented to the Veterinary Dispensary, Badapada, Kendrapada, Odisha with the complaint of intestinal evisceration following violent injury to left dorsal part of the abdomen caused by dog bite. Immediate stabilization and surgical intervention was carried out to save the life of patient.

KEY WORDS: Surgical, management, intestine, evisceration, pregnant, cat

INTRODUCTION

Abdominal evisceration is defined as herniation of the contents of the peritoneal cavity through the body wall with exposure of the abdominal viscera (Cigdem *et al.*, 2006). Abdominal evisceration injuries can be devastating injuries (Gower *et al.*, 2009). Trauma to the small intestine is uncommon. Etiology in both large and small animals is likely to have a genetic component; however, excess traction on an oversized fetus, physical injury, muscular weakness or cutting the umbilical cord too close to the abdominal wall are other possible predisposing causes (Rathod *et al.*, 2013). Intestinal and mesenteric injury occurs commonly with penetrating abdominal wounds and blunt abdominal trauma (Bojrab, 1983) or may occur with bite wounds of the abdomen (Slatter, 2003). Most cases of intestinal evisceration in cattle and small animals often occur following wound dehiscence (incisional hernias) or accidental wounds on the abdominal wall (Nelson, 1988; Herrmann *et al.*, 2000). Further, most of the reported cases of evisceration occur postoperatively. However, in some instances, it results from traumatic accidents or dog bites

(Bhowmick *et al.*, 2011). The protruded organ normally becomes very congested and necrosed during the evisceration. The exposed tissue rapidly becomes edematous and inflamed and is easily traumatized (Wykes, 1986). The present study places on record a successful surgical management of intestinal evisceration in a cat.

Case History and Observations

A three years old female pregnant cat weighing 6 kg. was presented to the Veterinary Dispensary, Badapada, Kendrapada, Odisha with the complaint of intestinal evisceration following violent injury to left dorsal part of the abdomen caused by dog bite in the morning (Fig. 1). Physical examination revealed that the animal was off-feed and dull. On clinical examination, the eviscerated organ was loop of small intestine and mesentery which were hyperaemic and contaminated. Respiration and pulse rates were slightly elevated with normal rectal temperature. Immediate stabilization and surgical intervention was carried out to save the life of patient.



FIGURE 1: Showing the evisceration of intestine in a pregnant female cat due to dog bite

TREATMENT & DISCUSSION

The animal was stabilized using i/v injection of Dextrose Normal Saline (100 ml) and followed by i/v injection of Ringers lactate (50 ml). The animal was anaesthetized with Ketamine @ 10 mg/kg b. wt. by i/m route. Xylazine was not administered in the pregnant cat to prevent abortion. The animal was placed in right lateral recumbency and the skin surrounding the eviscerated mass was prepared aseptically. Protruded visceral mass was washed with sterile lukewarm normal saline. Reduction of the engorged intestinal loops was impossible through the opening; hence, it was enlarged cranio-caudally. After

replacing the viscera, the peritoneum and the muscular layers were opposed by simple continuous sutures using chromic catgut no.1 in two layers. The skin was apposed with vertical mattress suturing pattern using silk size no. 1 (Fig. 2). Post-operatively; the animal was given Ceftriaxone 20 mg/kg b.wt i/v and Meloxicam 0.3 mg/kg b. wt. i/m for 5 days. The antiseptic dressing of surgical wound was done by Betadine till removal of skin sutures. There was uneventful recovery in a period of 10 days and then the skin sutures were removed. The cat also gave birth to two kittens after 15 days.



FIGURE 2: Showing the skin suture after the surgical repair of the eviscerated intestinal mass

Evisceration and self-induced trauma following abdominal surgical procedure are common indications for intestinal resection. Proper surgical technique and after care minimizes this complication (Bojrab, *loc. cit*). Prognosis of evisceration depends on severity of trauma, location, body organ exposed, bleeding, contamination, stabilization, strangulation, administration of antibiotics and early surgical intervention and post-operative care. Early stabilization and surgical intervention can increase the survivability of the animals with less or no post-operative morbidity (Gower *et al.*, 2009). Exposed viscera should be covered with sterile gauze to reduce contamination and tissue damage. Exposed organ may quickly get contaminated and may result in to shock stage from fluid and blood loss. The decision of closing the abdominal wall and superficial tissue depends on the amount and location of tissue damage and wound contamination. This was a fresh clinical case with minimal tissue damage and contamination, so routine abdominal wall closure was carried out immediately with the best possible postoperative care. Deep and severally contaminated wounds can be best managed by open peritoneal drainage techniques (Woolfson and Dulisch, 1986).

REFERENCES

Bhowmick, D., Shahi, A. and Souza, F.D. (2011) *Intas Polivet.*, **12**(1): 197.

Bojrab, M.J. (1983) *Current Techniques in Small Animal Surgery*, 2nd Edn. Lea & Febiger, Philadelphia, Pennsylvania: pp 164-165.

Cigdem, M.K., Onen, A. and Otcu, S. (2006) *Pediatr. Surg. Int.*, **22**:677.

Gower, S.B., Weisse, C.W. and Brown, D.C. (2009) *J. Am. Vet. Med. Assoc.*, **234**(2):1566.

Herrmann, R., Utz, J., Rosenberger, E., Wanke, R. and Doll, K. (2000) *Zuchtungskunde.*, **72**:258.

Nelson, D.R. (1988) In: *Text book of large animal surgery*, 2nd Edn. Williams & Wilkins, Baltimore: pp. 390-397.

Rathod, R., Rangananth, L. and Srinivasamurthy, K.M. (2013) *Surgical Management of Evisceration due to Congenital Failure of Closure of Umbilicus in a Newborn Calf. Indian Vet. J.*, **90**(7): 64 – 65.

Slatter, D. (2003) *Textbook of Small Animal Surgery*, 3rd Edn. Saunders Publication, Philadelphia: pp 593-599.

Woolfson, J.M. and Dulisch, M.L. (1986) *Vet Surg.* **15** : 27.

Wykes, P.M. (1986) *Current therapy in Theriogenology*, 1st Edn. WB Saunders Company, Philadelphia, pp. 145.