Surgical Management of Evisceration of Intestines Due to Dog Bite in a Kid- A Case Report

S. Prakash, A. Kumaresan, M. Selvaraju, K. Ravikumar and S. Sivaraman
Department of Clinics, Veterinary College and Research Institute, Namakkal, Tamil Nadu - 637 001

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 could lead to devastating injuries (Gower et al., 2009). Trauma to the small intestine is uncommon. 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). Evisceration of intestines after dog bite is very rare in farm animals. The present paper places on record a successful surgical management of evisceration of intestinal loop through dog bite wound.

Case History and observation
A two months old non-descript female kid was brought to Teaching Veterinary Clinical Complex, Namakkal with the complaint of dog bitten wound resulted in tearing of skin, muscle and peritoneum of the right paralumbar fossa and evisceration of 75 per cent of the intestinal loops. On clinical examination, reddish, painful and echymotic skin around the eviscerated organ without any perforation in the intestines were noticed (Fig. 1). The kid showed dyspnoea and restlessness with normal temperature and heart rate. Emergency surgical intervention was carried out to save the life of the animal.

Fig. 1 Evisceration of intestine due to dog bite

Treatment and Discussion
The animal was stabilized using Inj. 5% Dextrose normal saline (10ml/kg b.wt.) and eviscerated intestines were covered using gauze pieces soaked in normal saline. Pre-operatively Inj. Amoxicillin and Dicloxacillin 100 mg was administered intramuscularly. Only local infiltration of 2% lignocaine around the site of skin wound was done to minimize the risk of anaesthetic shock. The torn area of the skin was prepared aseptically and the wound was extended on both the sides to reduce the intestinal mass into the abdominal cavity and also the mass was examined thoroughly for any perforation, contamination and viability. Contaminated intestinal loops were lavaged with normal saline to remove the foreign materials. Then the intestinal loops were repositioned and reduced into the abdominal cavity. Following correction of the intestines, the peritoneum and abdominal muscles were closed using natural

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absorbable suture material chromic catgut No.1 with Horizontal mattress reinforced with simple continuous suturing pattern and the skin was opposed with simple interrupted suturing pattern using cotton thread.

Post-operatively the animal was treated with Inj.Amoxicillin and Dicloxacillin 100mg once daily for 5 days, Inj.Meloxicam @0.3mg/kg b.wt. intra muscularly for 3 days and antiseptic dressing of surgical wound by povidone iodine ointment for 10 – 15days. Standard post exposure antirabies vaccination schedule was followed. Skin sutures were removed on 10th post surgical day and the animal showed uneventful recovery.

The decision of closing the abdominal wall and superficial tissue depends on the amount and location of tissue damage and wound contamination. Primary repair should be appropriate for those animals with acute evisceration. Since the animal had minimal intra peritoneal but significant superficial tissue damage, routine abdominal wall closure was done in present case (Fig 2).

![Fig. 2 Surgical repair of eviscerated intestine](image)

Deep severely contaminated wounds should best managed by open peritoneal drainage techniques (Woolfson, 1986). Prognosis of evisceration depends on severity of trauma, location, organ exposed, bleeding, contamination, stabilization, strangulation, administration of antibiotics and early surgical intervention. Proper surgical technique and postoperative care minimizes the complications (Bojrab, 1983). Early stabilization and surgical intervention might increase the survivability of the animas with less or no postoperative morbidity (Gower et al., 2009). Exposed organ may quickly got contaminated and damage resulted in shock by fluid and blood loss. In the present case the tissue damage was minimal with less contamination. So routine abdominal closure was done with best possible postoperative care. Usually the Dog bite wound could not be closed completely but in this case considering the viability of the eviscerated mass and even wound margin, the skin was closed completely. This procedure also prevents further contamination and infection to the intestines.

References


