

SURGICAL REPAIR OF CROP FISTULA IN A HEN

*K. Manoj kumar¹, Makena Sreenu², D. Sai Bhavani³

Department of Veterinary Surgery and Radiology, NTR College of Veterinary Science, Gannavaram, Andhra Pradesh- 521 102, INDIA

ABSTRACT:

A case of traumatic crop fistula in a 4 month old hen and its successful surgical management has been reported.

Keywords: crop fistula, traumatic, hen

INTRODUCTION:

The crop (ingluvies) is a large dilation of the oesophagus located just prior to where the oesophagus enters the thoracic cavity. The crop provides the capacity to hold food for some time before further digestion commences. The crop problems occurred most frequently in the neonatal and young birds. Primary non infectious lesions of crop mainly included crop burns, foreign body penetration, Vitamin A deficiency, crop impaction and ingluviolith formations (Mallikarjuna Rao *et al.*, 2016). The present case describes the management of traumatic crop fistulation in a hen.

CASE HISTORY AND OBSERVATIONS:

A 4 month old hen was presented to the Department of Veterinary Surgery and Radiology, NTR College of Veterinary Science, Gannavaram with a complaint of wound at the neck region and the same was said to have happened due to traumatic injury caused by metallic foreign body which lead to draining of food grains through open wound on lower cervical oesophageal region. Clinical presentation of crop comprised of marked reddening, thickening and few necrotic granulating tissues with distendable crop region and pectoralis muscle tear (Fig.1). Based on history and clinical examination, it was diagnosed as a case of crop fistula and decided for surgical repair.

TREATMENT AND DISCUSSION:

The feathers around the wound were plucked manually and ruptured crop was prepared for reconstruction. Crop was located and demarcated by passing a tube through the mouth. Under linear infiltration anaesthesia using 0.5 ml of 2% lignocaine, the ruptured crop edges were freshened and closed by using no. 2-0 chromic catgut with two layers of inverting pattern (Fig .2). Muscle and skin were closed routinely (Fig. 3). Post operatively, the hen was kept on cephalosporins 50 mg per kg and multivitamin drops bid PO for 7 days. The wound healed uneventfully.

Reports are available on affections of crop including fistulation in a hen due to contact of sharp iron object (Phaneendra and Saibaba, 2015); crop injuries in birds by animal bites; foreign body ingestion; feeding excessively hot food grains etc (Harrison, 1987) and foreign body penetration causing crop injury in a pigeon (Basha et al., 2010). Foreign bodies may penetrate wall of the crop, leading to necrosis and loss of the food migrating to subcutis and wall of the neck, leading to widespread inflammation and necrosis (Bhasha et al., 2010). Trimming of the necrosed edges of the structure before its repair was advised by Bennett and Harrison (1994) in oesophageal perforations and Coles (2008) in fistulation of crop. The catheter used in the present case, maintained the luminal integrity of the crop at the time of anastomosis. Coles (2008) suggested using a catheter during repair of fistulous crop to identify the mucosa. The owner was advised to maintain the hen on soft diet. Appropriate surgical reconstruction of crop ensured an uneventful recovery in the present case without any postoperative complications.

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Fig 1: perforating wound on neck with ruptured crop in a hen



Fig. 2: Closure of Crop Fistula by inversion



Fig 3: Skin closure with nylon