Emergency ingluvotomy and clinical management of rat bait poisoning in non-descript hen: A rare case report

Thangamani A, A Uday Kiran, Sonia Banisetty, A Revathi, K Priyanka, N Ratnamrutha and K Rajesh

Abstract
Two non-descriptive hens presented to the Teaching Veterinary Clinical complex with the history of lateral recumbency and closed eyes since previous day evening. The birds were eaten rat bait that prepared for rat. The birds were stabilized with administration of dexamethasone sodium. On palpation the crop contained feed material that was removed by ingluvotomy for prevention of further absorption of toxin. On examination of crop material revealed that contains boiled rice along with pieces of black colour rat poison cake. The birds were administered with 0.3 ml of Vitamin-K and 0.4 ml of Tribivet injection intramuscularly. The incision site was closed after through washing of crop. Among two birds one bird was died after 5 hrs of treatment. At the end one bird was recovered uneventfully after treatment.

Keywords: crop, ingluvotomy, lignocaine, menadione, poultry, rat bait

Introduction
Poisonings are more common in large and small animal but rare or resistant in poultry species [1]. Rodenticides are chemical preparations used to destroy rodents, particularly mice and field rats. They are required to control the over population of rodents and prevent losses caused by them. Rodenticides should be selectively toxic to the rodents and non-toxic to the man and farm animals [1]. Anticoagulant rodenticides are mostly odourless and tasteless compounds, so they do not produce bait shyness [1]. Rodenticides toxicity more commonly recorded in small animal like dog with different clinical signs [2]. There is no record regarding rat bait poisoning in poultry species. The present case recorded the rat poisoning in non-descript hens and its clinical management followed by emergency ingluvotomy.

Case history and observation
Two non-descriptive hens presented to the Teaching Veterinary Clinical complex, NTR College of Veterinary Science, Gannavaram, Andhra Pradesh, India with the history of lateral recumbency and closed eyes since previous day evening. The birds were eaten rat bait that prepared for rat. Remaining three birds were died in farmer home itself. On through palpation of crop revealed feed materials present in the crop. In one bird the clinical status was very poor. It necessitates performing ingluvotomy to remove the feed material from the crop for prevention of further absorption of toxin.

Treatment and Discussion
The birds were stabilized with administration of dexamethasone sodium. The feather near the crop area was plucked by hand followed by cleaned with Povidone iodine to maintain the aseptic condition. The skin and crop incised by using Baird parker blade after local instillation of 2 per cent lignocaine hydrochloride (Fig: 1). The crop was completely everted to visualise the feed materials. The crop materials contain boiled rice along with pieces of black colour rat poison cake. The crop thoroughly cleaned with normal saline to prevent further absorption of toxin. The crop closed with inversion pattern of suture followed by skin closed with apposition suture pattern (Fig: 2). The birds were administered with 0.3 ml of Vitamin-K (Menadione) and 0.4 ml of Tribivet injection intramuscularly. Among two birds one bird was died after 5 hrs of treatment. At the end one bird was recovered uneventfully after treatment. Anticoagulant rodenticides most probably cause haemorrhage from the intestine and some time from nasal [1, 3, 4, 5]. But in the present case no signs of intestinal and nasal haemorrhage. Only in this case birds show lateral recumbency with gasping type of respiration. Emergency
ingluvotomy in the present case revealed that the confirmative diagnosis of poisoning due to rat bait that was present in the crop along with normal feed material. The present case suggested that there was no haemorrhagic signs are appeared in the birds. Among them one bird died that could be due to delayed presentation with poor prognosis, and most probably the toxin reaches systemic circulation. The present case record a rare case of rat bait poisoning in birds and it can be managed with both clinical as well as emergency ingluvotomy.

Fig 1: Ingluvotomy done by standard protocol

Fig 2: Crop and skin closed as per standard procedure

References