Adverse Drug Reactions of Enrofloxacin in A Jersey Cow - A Case Report

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Abstract
A five year old jersey cross bred cow was presented to the Veterinary College and Research Institute hospital, Namakkal with the history of sudden onset of urticaria lesion all over the body after intramuscular injection of enrofloxacin. Haematobiochemical examination revealed normal haemoglobin, haematocrit level and biochemistry parameters within normal range. The cow was treated with antihistamine and fluid therapy for three days and uneventfully recovery was noticed following therapy.

Key words: Urticaria, Enrofloxacin, Chlorphenaramine maleate

Anaphylactic reaction is most commonly occurs in penicillin group of drugs but rarely occurs in fluoroquinolones drugs. This paper reports clinical findings of anaphylactic reaction caused by enrofloxacin in a cow.

Case History and Observations
A five year old Jersey crossbred cow was presented to the Veterinary College and Research Institute hospital, Namakkal with the history of sudden onset of urticarial lesion all over the body after intramuscular injection of enrofloxacin. The animal showed respiratory distress, salivation, in-coordination, urticaria, facial and eyelid oedema and haemorrhagic diarrhoea (Fig: 1&2). Elevated body temperature (40.8°C), heart rate (112/minute), respiratory rate (48/minute) were observed. Peripheral blood smear, blood, serum, urine and rumen fluid did not reveal any abnormalities. (Hb: 16.7g/dl; RBC: 7.6×10⁶/ul; PCV: 51%; WBC: 5.2×10³/ul; Neutrophils-33%; Lymphocytes-63%; Monocytes-1% and Eosinophils-3%). Based on history and clinical symptoms, it was diagnosed as adverse drug reactions by enrofloxacin.

Treatment and Discussion
The cow was administered with intramuscularly chlorphenaramine maleate (@ 10ml total dose daily) and 5% dextrose and normal saline (@ 5lit/day I/V) for 3 days. Smith (2015) recommended the treatment of anaphylaxis in cow.

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Fig 1: Eyelid edema

Fig 2: Generalized urticaria
with epinephrine, steroid and antihistamine.

Chandra et al., (2014) reported that adverse drug reactions due to enrofloxacin included salivation and giddiness in four cows. Enrofloxacin had a narrow safety margin and was usually not tolerated by young animals. Bowl edema and fluid translocation could occur resulting in diarrhoea which might be haemorrhagic in nature. Most frequent side effects of fluoroquinolones were gastrointestinal disturbances and CNS excitement in large animals (Vancutsem et al., 1990).

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References


Endoscopic Retrieval of Gastric Metallic Foreign Bodies in a Labrador

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Abstract

Two years old Labrador was referred with history of ingestion of foreign bodies and repeated vomiting. Dog was apparently healthy with normal vital and haematological parameters. Abdominal radiography revealed presence of two foreign bodies in the stomach region. Under general anaesthesia, under endoscopic guidance foreign bodies were retrieved successfully without any complication.

Key words: Endoscopic retrieval, gastric foreign bodies, dog.

Gastrointestinal foreign bodies are commonly encountered in dogs due to indiscriminate eating habits (Leib and Sartor, 2008). The present article describes the successful retrieval of gastric metallic foreign bodies in a dog under endoscopic guidance.

Case History and Observations

A two year old, male Labrador dog was referred to the Veterinary College and Research Institute Hospital, Namakkal with complaint of vomiting for two days. The owner observed the dog swallowing the nail while playing. From

Fig.1: Lateral view of abdomen showing presence of foreign bodies