

INTESTINAL ILEUS AS A SEQUELA TO GASTROENTERITIS IN A LABRADOR PUPPY - A CASE REPORT

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ABSTRACT

Ileus or intestinal distention can be caused by inflammation (adynamic/functional) or by obstruction (dynamic/mechanical). Adynamic ileus is a common sequela to parvoviral enteritis, abdominal surgery, pancreatitis, peritonitis, endotoxemia, hypokalemia and dysautonomia. Radiographically functional ileus was characterized by dilated intestinal loops filled with either air or fluid contents. The present paper describes a case of ileus in a three month old male Labrador puppy suffering from gastroenteritis.

Keywords: Intestinal ileus, gastroenteritis, radiography, blood gas analysis

INTRODUCTION

Ileus or intestinal distention can be caused by obstruction (mechanical) or by inflammation (functional) of gastrointestinal tract. In dogs, decreased peristalsis delays transit and manifesting clinically as functional ileus. In enteric infections, ileus is common and promoting further diarrhea as stasis allows bacterial fermentation. The present paper describes a case of intestinal ileus in a puppy suffering from gastroenteritis and its successful management.

CASE HISTORY AND OBSERVATION

A three month old male Labrador puppy was presented to the casualty unit of University Veterinary Hospital, Kozhikode, Thrissur, Kerala, with a complaint of vomiting, diarrhoea and weakness for five days. The puppy was not vaccinated and under treatment for gastroenteritis for the past five days in a local veterinary hospital with antibiotics, antacids, fluids and antiemetics. On examination, physical parameters were in normal range but the animal was dull and dehydrated. On abdominal palpation, intestinal loops appeared thickened and cod like. Animal was subjected to plain radiography of abdomen in right lateral position, which revealed distended intestinal loops with gas (Fig. 1). Haematology revealed leucopenia, lymphocytosis, granulopenia and anemia (WBC- $3.4 \times 10^3/\mu\text{l}$, Lym-39.2%, Gra-51%, RBC- $3.77 \times 10^6/\mu\text{l}$, Hb-9.9 g/dl, PCV-24.8% and Platelet- $376 \times 10^3/\mu\text{l}$). Blood smear was negative for blood parasites and the biochemical parameters were in normal range. Blood gas analysis using epoc BGEM card revealed respiratory alkalosis (pH-7.489, pCO_2 -30.3mmHg, cHCO_3 -23.1mmol/L, BE -7.3mmol/L, Na^+ -133mmol/L, K^+ -3.4

mmol/L, Lactate- 1.57mmol/L) with low sodium and potassium levels.

TREATMENT AND DISCUSSION

The animal was given Ringer lactate, 3.5 ml of 15% Inj. Potassium chloride (7mmol) mixed with 250 ml normal saline solution, Inj. Astymin, Sulphatrimethoprim, ondansetron, pantoprazole and B complex vitamins intravenously for three days. Vomiting stopped on the first day itself and animal became active and has started taking liquid diet. Radiograph was taken on third day showing the intestinal loops of normal size (Fig. 2).

In the present case, the puppy had gastroenteritis. Animals with gastrointestinal diseases frequently have acid base and electrolyte abnormalities (Boag *et al.*, 2005). In this case, blood gas analysis revealed that animal had respiratory alkalosis and low potassium and low sodium concentrations. Respiratory alkalosis is characterized by increased blood pH, decreased HCO_3^- and decreased PCO_2 . Respiratory alkalosis results from hyperventilation due to primary respiratory disorders, acute pain, psychological distress or gram negative sepsis (Felver, 2013). Low potassium level can lead to motility disturbances in the intestinal loops leading to ileus (Hall and German, 2010). Functional ileus is a common sequela to parvoviral enteritis, abdominal surgery, pancreatitis, peritonitis, endotoxemia, hypokalemia and dysautonomia (Hall and German, 2010).

SUMMARY

A case of intestinal ileus as a sequel to gastroenteritis in a Labrador puppy and its successful management is reported.



Figure 1. Right lateral radiography of abdomen of the puppy on day one with dilated air filled intestinal loops suggestive of ileus

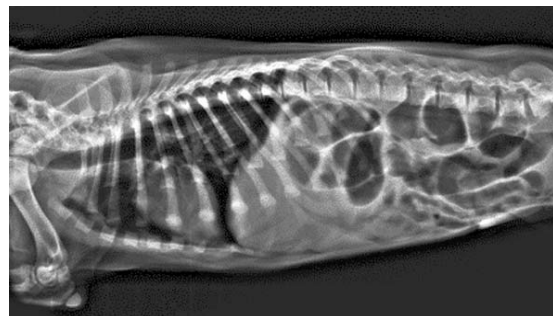


Figure 2. Right lateral radiography of abdomen of the same puppy after three days of treatment, showing improvement.

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