Radio-diagnosis of fecoliths and its non-surgical management in dogs

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ABSTRACT

Two cases with a history of cessation of feces for 2 weeks, depression, lethargy and anorexia in two different dogs; a Labrador male and a Doberman female, were presented. On physical examination, abdominal distension along with intense pain was observed. Blood samples were collected from the dogs for hematological and biochemical analyses. The examination revealed an increased percentage of packed cell volume (PCV) due to hemoco-concentration. The radiological examination of both dogs showed radiopaque material in the large intestinal tract (colon in Labrador and colon & cecum in Doberman). Right and left lateral (Figure 1) views were taken.

TREATMENT & MANAGEMENT

Both cases were treated by aggressive fluid therapy comprising of Normal Saline and Dextrose (5%), Oral Docusate Sodium, Augmentin 1.2g, NSAIDS, Meloxicam @0.5mg/kg of body weight (b. wt.), and Tribivet 1ml; each of them were administered through intravenous (IV) route for 5 days. The cases were assessed clinically and by radiological examination of the abdomen on daily basis during the treatment. Each case showed disintegration of the radiopaque material (fecolith) on subsequent days of the treatment (Figure 2). On the 5th day of treatment, Milk of Magnesia (2-4 ml/lb b. wt.) was given orally, followed by rectal Enemata with Liquid Paraffin. Both the cases showed evacuation of the semi hard stool after application of purgatives. Complete recovery was recorded on day
Figure 1. Left lateral views of large intestinal tracts taken from Labrador (A) and Doberman (B). White arrows indicate the colon and cecum impacted with fecoliths.

Figure 2. Disintegration of the radiopaque material (arrows in the figures) on subsequent days of the treatment in Labrador (A) and Doberman (B), respectively.

Figure 3. Cases showing evacuation of the semi hard stool (arrows in the figures). Complete recovery was recorded after 11 days treatment in Labrador (A) and Doberman (B), respectively.

11th post medication (Figure 3). of the semi hard stool after application of purgatives. Complete recovery was recorded on 11th day (Figure 3).

DISCUSSION

Cessation of feces in dogs is relatively common. It may be due to functional obstruction or cessation of peristaltic movements of gastrointestinal tract. Obstruction may be partial or complete. Mechanical obstruction of the intestine occurs due to either intraluminal mass or external compression of the intestinal wall. Intraluminal obstruction can occur due to some foreign body, fecolith, impacted ingesta and huge parasitic infestation (McColl, 2010). Various diagnostic modalities are used in diagnosis of intestinal obstructions such as ultrasonography and digital radiography (Guandalini, 2011).

The present study reports the incomplete obstruction of the intestine in two dogs, its successful medicinal treatment, monitored by a computed radiology system.
Despite considerable advances in diagnostic methods for small intestinal obstruction, plain radiography remains the basic one (Graham et al., 1998). However, survey radiography can be unremarkable in chronic partial obstruction and ileo-colic intussusception (Banerjee et al., 2010). Contrast radiography, with liquid contrast media or barium-impregnated polyethylene spheres, can assist in diagnosis but may not be appropriate in emergency cases and often does not give more information than plain radiography (Talbert et al., 2012). In our study, the lodgments of fecoliths were found in colon and cecum of the dogs.

The cases were managed successfully via medicinal approach (non-surgical) aided by radiology. It is suggested that radiological study could be an important tool for diagnosing fecolith condition in dogs and to monitor the progression of the condition with medical treatment (non-surgical management).

REFERENCES