A 15-month-old 28-kg (61.6-lb) castrated male crossbred dog was evaluated for a 3-month history of intermittent signs of pain during defecation, hematochezia, and vomiting. No abnormalities were detected on physical examination. Results of a CBC and serum biochemical analyses were within reference ranges. Abdominal radiography was performed (Figure 1).

Determine whether additional imaging studies are required, or make your diagnosis from Figure 1—then turn the page →
Diagnostic Imaging Findings and Interpretation

Radiographic evidence of gas in the pyloric antrum is seen. The fundus, given that it is not clearly defined, likely contains fluid or is nondistended. A soft tissue opacity appears to be protruding into the lumen of the proximal aspect of the ascending colon. This soft tissue opacity is elongated, is irregular in shape, and measures approximately 2.2 × 5.5 cm. The width of a gas-filled intestinal segment caudal to the proximal aspect of the ascending colon is within reference limits and appears to be the ileum (reference value is < 1.6 times the width of L2; Figure 2). On the lateral projection, there is a curvilinear intestinal segment that contains a small amount of gas and is likely to represent a moderately dorsally displaced descending duodenum. Radiographic differential diagnoses included ileocolic, colocolic, and cecocolic intussusception. An intraluminal mass, such as a foreign body, abscess, granuloma, or neoplasia, should also be considered. Cecocolic intussusception was considered most likely given the size and shape of the structure and considering the absence of a visible cecum.

To further investigate a possible intussusception, abdominal ultrasonography was performed. Intussusception of the cecum into the ascending colon, resulting in a multilayered blind-ended tubular intussusception within the colon, was evident (Figure 3). Wall layering was preserved, and color flow Doppler ultrasonography revealed normal vascularization of the intussusceptum. The pericolonic tissues were ultrasonographically normal. Repeated ultrasonography 24 hours later confirmed the intussusception.

Treatment and Outcome

Given the diagnostic imaging findings and demonstration of persistent intussusception through repeated ultrasonography 24 hours later, surgical resection and anastomosis was considered the treatment of choice. At celiotomy, the cecum was firmly adhered and nonreducible as a result of chronicity of the condition. The affected segment was exteriorized and packed off from the rest of the abdomen. The terminal ileum, ileocolic junction,
proximal portion of the colon, and intussuscepted cecum were resected, and end-to-end appositional anastomosis was performed. The abdomen was closed routinely. The dog received fenbendazole (50 mg/kg [22.7 mg/lb], PO, q 24 h) for 3 days (as a prophylactic treatment) and made an uneventful recovery from surgery.

**Comments**

There are few reports in the literature of ceco-colic intussusception in dogs, and it appears to be an uncommon finding. Suggested etiologies include intestinal parasitism, linear foreign bodies, parvoviral enteritis, intestinal neoplasia, and prior abdominal surgery. Ileocolic ligament instability has also been suggested. Distension of the segment of colon into which the cecum was intussuscepted has been reported in the literature. The use of contrast radiography, such as double contrast colonography, can allow identification of the intussuscepted cecum, which appears empty of contrast medium (filling defect) and is not in the normal anatomic position. In the dog of the present report, the combination of findings on plain abdominal radiography and abdominal ultrasonography was diagnostic; therefore, contrast imaging was not considered necessary for confirmation.

The most common complications observed following surgical correction of an intussusception are dehiscence of the anastomosis, intestinal obstruction, peritonitis, and increased risk of small intestinal bacterial overgrowth if the ileocolic junction is resected. No postoperative complications were encountered for the dog of the present report and the dog remained clinically normal following surgery.


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**New Veterinary Biologic Products**

<table>
<thead>
<tr>
<th>Product name</th>
<th>Species and indications for use</th>
<th>Route of administration</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bronchitis Vaccine, Georgia Type, Live Virus (Zoetis Inc, Lincoln, Neb, US Vet Lic No. 190)</td>
<td>For vaccination of chickens at 1 day of age as an aid in the prevention of disease caused by infectious bronchitis virus, Georgia type, Georgia 2008. Safety and efficacy were demonstrated in day-of-hatch birds receiving the product via spray.</td>
<td>Spray at 1 day of age</td>
<td>USDA licensed October 2013</td>
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