

IT'S YOUR CASE

Species: Canine

Breed: Dalmatian

Sex: Male Neutered Age: 1 year

Clinical History:

He presents for acute collapse. There has been no observed vomiting or diarrhoea. Clinical examination reveals mild pyrexia (39.3°c), tachycardia and severe dehydration. He has a tense abdomen and mild ptyalism.

Biochemistry and haematology show signs consistent with severe dehydration and nonspecific inflammation (moderate leucocytosis, moderate neutrophilia, monocytosis, eosinopaenia, lymphopaenia). Coagulation times are normal.

Anatomic regions: Abdomen

Details of study and technical comments: Right and left lateral as well as ventrodorsal views of the abdomen.

Diagnostic interpretation:

ABDOMEN:

The small intestinal loops are gas distended, parallel to each other and in a mildly swirling pattern within the cranial half of the abdomen (lines); these segments are inappropriately distended (red arrowheads). The stomach and large intestine have normal appearance.

There is a moderate reduction in serosal contrast, mild abdominal distention and whispy appearance of the peritoneal fat (light blue arrows).

The liver and urinary bladder have normal appearance. The spleen and kidneys are not visible.

The abdominal boundaries are normal apart from only 6 lumbar vertebrae (incidental).

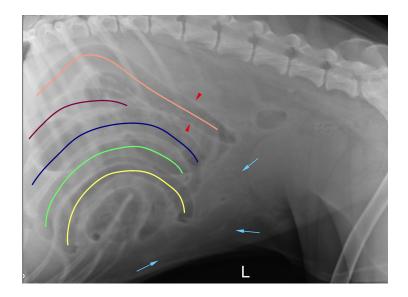


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This report is based on the available history and radiographic interpretation only and not on a physical examination of the patient. It has been prepared specifically for interpretation by the currently licensed and registered veterinary surgeon responsible for the care of this patient.



Conclusions:

- Multiple small intestinal loops distended with gas and stacked with a swirling pattern. A segmental gastroenteropathy affecting a large portion of the jejunum is suspected. Differentials include mesenteric volvulus, segmental enteritis, or vascular compromise.
- Peritoneal effusion. This may be inflammatory or haemorrhagic

Additional comments:

Segmental enteropathies can represent multiple differentials however there are certain features of this case that raise concern for mesenteric volvulus: the appearance of the small intestine, peritoneal effusion and the collapse of the dog. This differential is critical to recognise as it is a time-critical surgical emergency. Segmental distention will progress as vascular injury becomes protracted but early intervention is critical. Computed tomography can be useful in confirming the suspicion if there is hesitation with exploratory laparotomy.

Outcome:

The patient was expedited to surgery. Intestinal congestion and inflammation were present. In excess of 2 L of abdominal fluid and black fibrous material was distributed throughout the peritoneum but concentrated in the mesentery. Perforation was not identified. Transient mesenteric torsion with tearing of the mesentery was concluded.

Literature:

Junius, G., Appeldoorn, A. M., & Schrauwen, E. (2004). Mesenteric volvulus in the dog: a retrospective study of 12 cases. *Journal of small animal practice*, *45*(2), 104-107.

Cairo, J., Font, J., Gorraiz, J., Martin, N., & Pons, C. (1999). Intestinal volvulus in dogs: a study of four clinical cases. *Journal of Small Animal Practice*, *40*(3), 136-140.



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