

# **IT'S YOUR CASE**

Species: Canine Breed: Great Dane Sex: Male Neutered Age: 6 years

### **Clinical History:**

He initially presented two days ago for vomiting and was managed on an outpatient basis. Although the vomiting subsided, he remains anorexic. On presentation today, he was tachycardic, shocky and painful during abdominal palpation which has responded well to intravenous fluid therapy and pain management.

CBC: HCT= 62 (H) Chemistry: Pending AFAST/TFAST: Normal

Anatomic regions: Abdomen

Details of study and technical comments: A radiographic study of the thorax and abdomen is presented for evaluation. The study consists of right and left lateral views as well as a ventrodorsal view of the abdomen.

#### **Diagnostic interpretation:**

ABDOMEN:

There is good abdominal serosal contrast. The visible margins of the liver and spleen are radiographically within normal limits.

The gastric silhouette contains gas and is displaced cranially by the markedly distended segments of colon. Along the left wall of the fundus, and an irregular margin is evident (orange arrowheads). The ascending and transverse colon (red arrows) are difficult to trace but are markedly distended with gas and heterogenous material. The caecum is suspected to be in the left mid-abdomen (blue arrows), caudal to the gastric fundus (yellow arrows). The descending colon is narrow and empty (green arrows). The small intestine is generally soft tissue opaque or contains a small amount of gas; it is within normal limits for diameter and margination.

The renal and urinary bladder silhouettes are smoothly marginated and within normal limits. There are no radiopaque calculi.

The lumbar vertebral column is unremarkable without evidence of fracture, luxation or osteolysis.



t. +44 (0)1223 790 439 www.vet-ct.com e. info@vet-ct.com Co Number 6955449 Registered Office: Broers Building, 21 JJ Thomson Avenue, Cambridge, CB3 0FA, UK ABN 24601862220 Registered Office in Australia: Unit 3, 6 Riseley Street, Applecross, WA 6153, Australia

CRN 6241529 Registered office in US: 3505 Lake Lynda Drive, Suite 200, Orlando, Florida, 32817, USA 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.



# **INCLUDED THORAX:**

The visible pulmonary vasculature is narrow in diameter and tapers as it extends to the periphery. The caudal vena cava is variable ranging within normal limits to narrow.

#### Conclusions:

- Colonic distention and suspected abnormal positioning of the caecum. Primary consideration is given to colonic malpositioning (i.e. torsion) or vascular compromise (i.e. entrapment).
- Possible gastric mural change versus gastritis.
- Suspect hypovolaemia.

# Additional comments:

The changes associated with gastrointestinal tract are primarily linked with the caecum and colon. There is global distention of the ascending and transverse segments however the path is difficult to confidently trace. Radiographic features associated with colonic torsion include segmental distention, consistent malpositioning and caecal malpositioning. These factors are present in this exam. That feature which is not observed is focal narrowing which often delineates the site of torsion; this may be obscured by distended segments.

Of uncertain clinical significance is noted change associated with the gastric wall. Further evaluation of the global picture in the abdomen can be made with computed tomography which may prove valuable in a patient of the size.

#### Outcome:

The patient proceeded to exploratory laparotomy. The descending colon was rotated 180 degrees clockwise and manual reduced. The transverse colon was moderately hyperaemic and moderately to severely dilated



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without evidence of haemorrhage, necrosis or vascular shearing. The contents were milked aborad and the features of viability improved.

# Literature:

Gremillion, C. L., Savage, M., & Cohen, E. B. (2018). Radiographic findings and clinical factors in dogs with surgically confirmed or presumed colonic torsion. *Veterinary Radiology & Ultrasound*, 59(3), 272-278.

Czajkowski, P. S., & Fryer, K. J. (2020). Colonic torsion in 4 Great Danes. Journal of Veterinary Emergency and Critical Care, 30(5), 581-586.



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