

**DATE PRESENTING CLINICAL SIGNS**

8/4/22

Patient presented to urgent care 3 weeks ago for ADR. Radiographs showed a possible sliding hiatal hernia. Owner worried he has pain in mid spine. Physical exam is unremarkable. Owners have been informed ultrasound is not used to diagnose sliding hiatal hernia or hemivertebrae

PATIENT

Oliver Childs

Current Medications: metacam 30 pound dose po daily.
Radiographs: sliding hiatal hernia and hemivertebrae.

SPECIES

Canine

Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

BREED

French Bulldog

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

SEX

Neutered Male

The visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

AGE

11/18/16

The left kidney has a normal shape and size (4.51 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

32 Pounds

The right kidney has a normal shape and size (4.49 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

Adrenal Glands

The left adrenal gland is normal in size measuring 0.64 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

IMAGING PERFORMED BY

Rachel Brilhart RDMS

The right adrenal gland is normal in size measuring 0.76 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

HOSPITAL NAME

Madonna Vet Clinic

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

REFERRING VET

Dr. Brockett

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

INVOICE

40172

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains large shadowing ingesta. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. The gastroesophageal junction is visualized and appears slightly prominent.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measured 0.36 cm. Jejunum wall measured 0.32 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

Other

There is a small area of fuzzy hyperechoic tissue visualized near the liver. There is no obvious pancreatic tissue or other abnormalities in this area. This could be insignificant or questionable inflammation secondary to the sliding hernia/periodically trapped fat?

The gastroesophageal junction is visualized with a small amount of distal esophagus which appears slightly thickened with some intraluminal fluid. This could be normal anatomic variation, inflammation, infiltration, etc.

ULTRASONOGRAPHIC FINDINGS

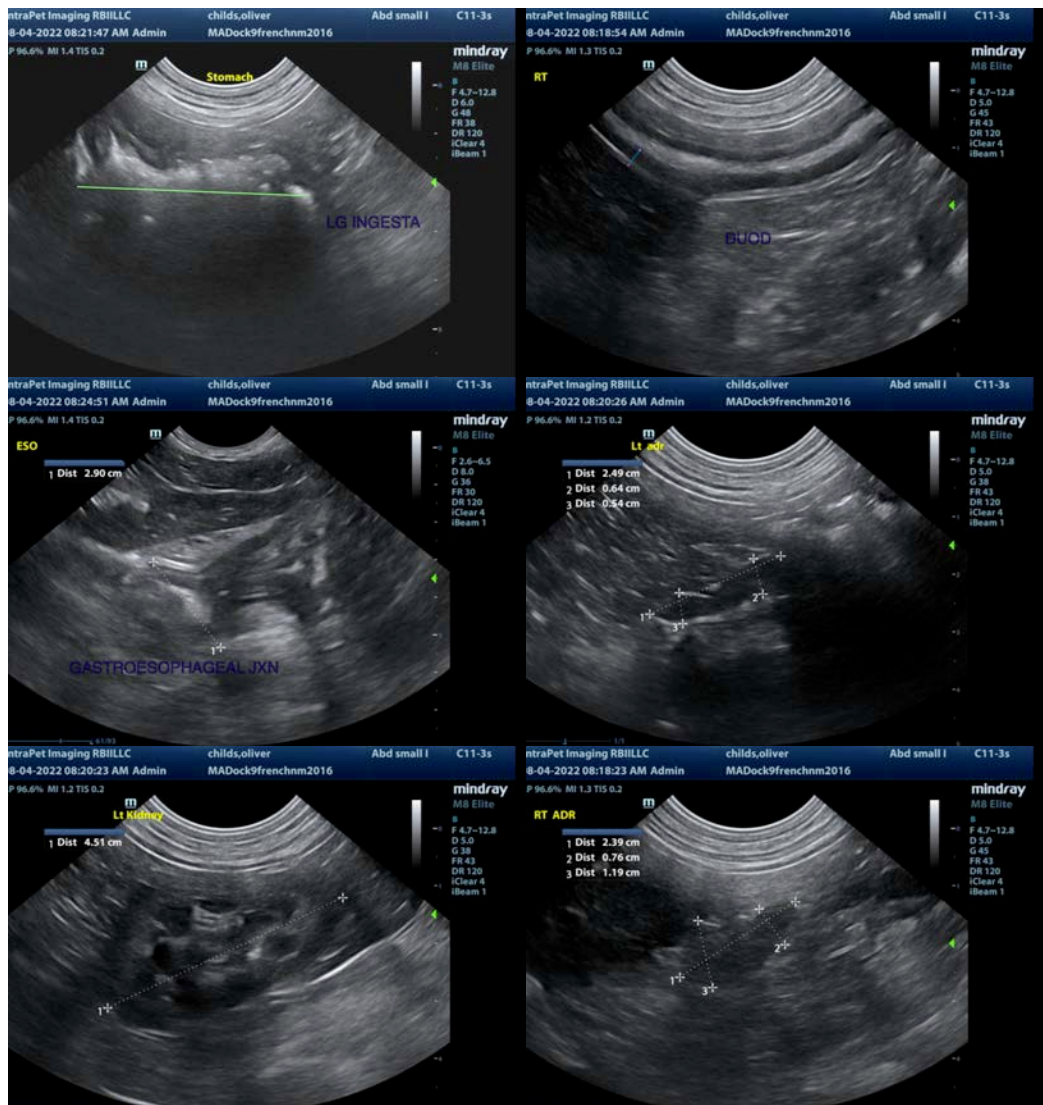
- Large, shadowing ingesta visualized within the gastric lumen – Moderate amount of shadowing material in gastric lumen - Correlate with feedings history and abdominal radiographs. If adequately fasted then consider such differentials as delayed gastric emptying or a partial outflow tract obstruction (none visualized).
- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Focal hyperechoic inflamed mesentery/fat near the liver – This could be secondary inflammation of the fat due to past episodes of herniation and fat entrapment?

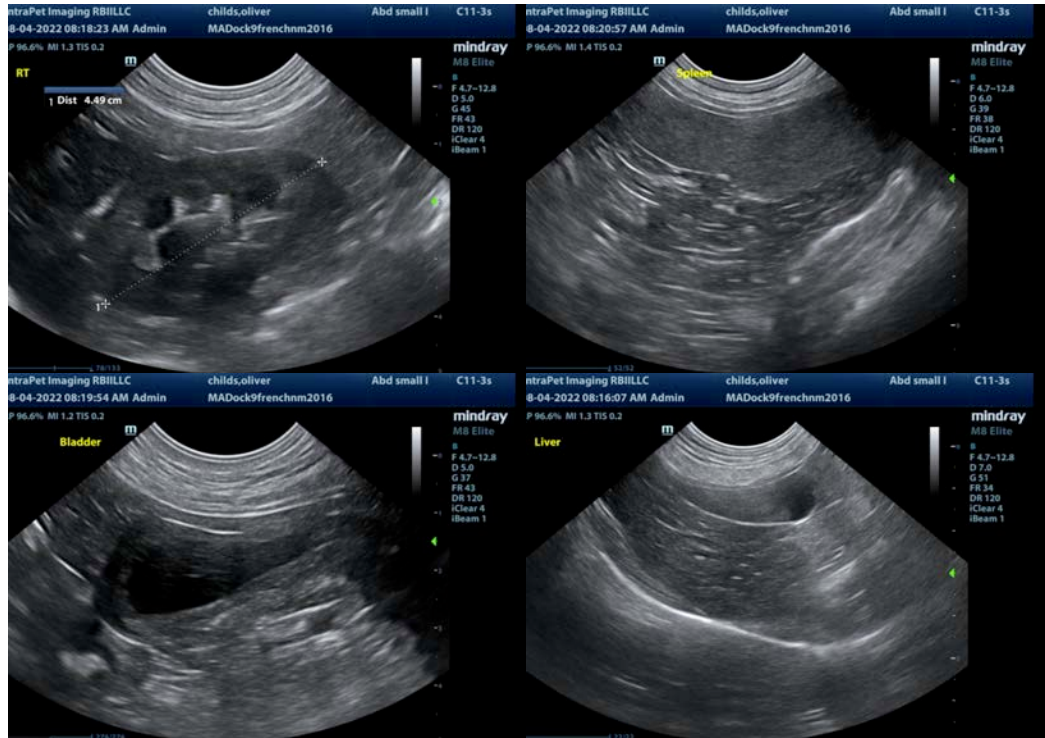
- Small amount of esophageal fluid and subjective esophageal thickening – consider further evaluation of the hiatal hernia and distal esophagus.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The general abdominal scan appears relatively normal. The gastroesophageal junction appears somewhat prominent with a small amount of intraluminal material within the esophagus and mild thickening. It is unknown if this is an incidental finding, as most pets with hiatal hernias so not feel sick, they just have a lot of regurgitation (unless they have aspiration pneumonia, etc.). Consider 3-view thoracic radiographs and consider evaluation of the spine for possible pain.

Further evaluation of the hiatal hernia would optimally involve a fluoroscopic swallow study and endoscopy to evaluate the sphincter and distal esophagus.





The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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