

**DATE PRESENTING CLINICAL SIGNS**

7/12/23

3yr history of HAC/PDH managed with Vetoryl. Has been slowing down since February and acting off. Shaking/trembling intermittently, progressive hindlimb weakness with occasional collapse in the hind, intermittent vomiting. Acutely ill last week (hyporexia, lethargy, diarrhea, weight loss) and diagnosed with pneumonia (likely aspiration), concern for scant peritoneal effusion on abdominal radiographs. Rapidly progressive ALP, climbing bilirubin. Clinically better but still not 100%. Concern for hepatosplenomegaly on exam.

PATIENTGordon Ramsay
Ausmus**SPECIES**

Canine

Current Medications:

Lab Results: 7/6: Chem--Alb 2.7, glob 3.8, ALP 293, Glu 61 (send out), Mg 1.4, K 3.2, PSL 277, bili 0.2
CBC--PLT 117K (clumped), neuts 16K, T4 0.7, FT4 20.9. 7/11: Alb 2.8, ALP 2478, bili 0.6, glucose and potassium WNL, glob 4.2.

BREED

Boxer X

Radiographs: report--patchy alveolar pattern R middle and cranial L caudal, decreased abdominal serosal detail.

SEX

Neutered Male

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**AGE**

11/23/12

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.

WEIGHT

29.2 kg

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.

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

The left kidney has a normal shape and size (7.02 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

HOSPITAL NAME

Nexus Vet Specialists

The right kidney has a normal shape and size (6.53 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

REFERRING VET

Dr. Steele

Adrenal Glands

The left adrenal gland is borderline large, hypoechoic, and slightly irregular in shape, measuring 0.82 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.

INVOICE

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The right adrenal gland is large and hypoechoic, measuring 1.09 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.

Spleen

The spleen is large and irregular. The spleen echotexture is heterogeneous, hypoechoic and mottled. The blood flow through the hilus and splenic parenchyma appears normal. There is a slightly ill-defined mixed echogenic hyperechoic mass effect visualized towards the cranial aspect of the spleen measuring 2.75 cm x 2.45 cm.

Liver

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

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

There is focal hard shadowing material visualized within the gastric lumen measuring 2.59 cm in diameter. The gastric wall measures at a normal thickness of <0.70 cm with some variability due to the presence of rugal folds. The distinction of gastric wall layers is adequate, and there is no impression of reduced peristaltic activity. In many views there is a hypoechoic rounded structure measuring 1.68 cm x 1.39 cm, which appears associated with the cranial aspect of the gastric wall. This could represent an extraluminal gastric mass (attached to the serosal surface) or more likely it could be associated with the mass effect at the ileocecal junction and possibly adhered to the gastric wall(?).

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. Jejunum wall measures 0.25 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

There is an irregular mass effect visualized in the mid cranial abdomen, most consistent with a mass effect at the ileocecal junction. This lesion measures approximately 2.29 cm x 2.63 cm with irregular wall thickening, measuring approximately 0.80 cm with complete loss of layering. Adjacent to this mass effect is a rounded hypoechoic extension of the mass, which is suspected to be the lesion described under stomach coming into contact with the gastric serosal surface.

Pancreas

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

Free Abdomen

There is a small amount of free abdominal fluid. No lymphadenopathy. The omentum is generally hyperechoic but particularly around the suspected mass effect at the ileocecal junction.

ULTRASONOGRAPHIC FINDINGS

- Bilaterally large, irregular, hypoechoic adrenal glands – The bilateral adrenomegaly is consistent with the diagnosed PDH.
- Large, hypoechoic, irregular, mottled spleen with a mixed echogenic mass effect – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis. A focal solid mixed echogenicity mass is visualized associate

with the spleen. This mass distorts the splenic capsule. Differentials include : benign lesions (lymphoid hyperplasia, hemangioma etc..) or cancerous lesions (hemangiosarcoma, lymphoma, histiocytic sarcoma etc..)

- Hypoechoic, heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.
- Area of bowel with irregular wall thickening and loss of layering – This mass effect is suspected to be involving the ileocecal junction. An extension of this mass effect appears possibly adhered to/coming into contact with the serosal surface of the stomach. Findings are concerning for a neoplastic process (round cell neoplasia, carcinoma, other).
- Hard shadowing intraluminal gastric material – Findings are concerning for a gastric foreign body.
- Small volume free abdominal fluid.

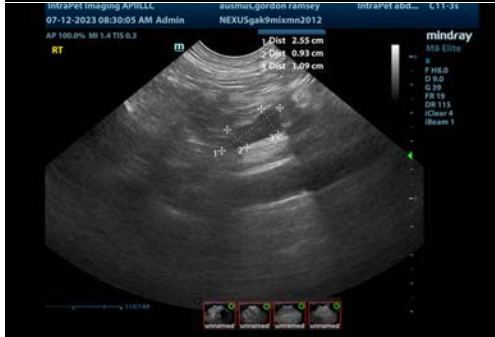
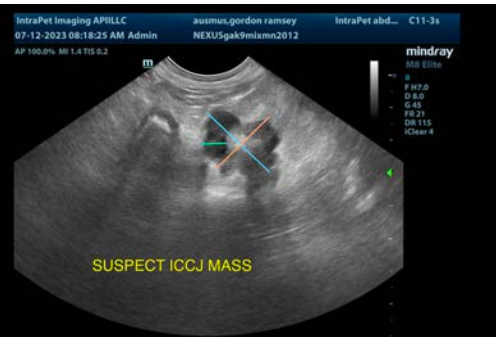
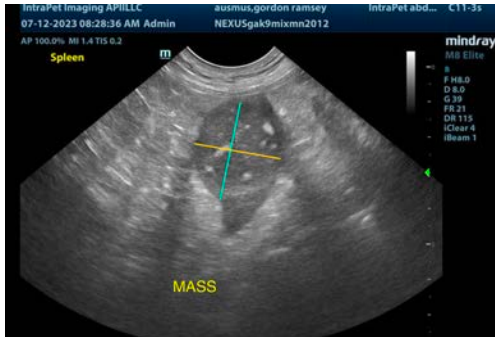
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Limited thoracic evaluation was recommended and declined.

Ultrasonographic findings include large adrenals, a large irregular mottled spleen with a focal mixed echogenicity mass effect, a hypoechoic heterogenous liver, gall bladder debris, a suspected mass effect at the ileocecal junction, a shadowing gastric foreign body, and free fluid.

Further diagnostic and therapeutic recommendations regarding this exam to be made by Dr. Cara Steele.







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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