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DATE PRESENTING CLINICAL SIGNS

8/2/22 Presented on 07/18 for diarrhea, blood work and radiographs unremarkable, patient has been continuing to act lethargic, pacing and having difficulty getting comfortable with slightly decreased appetite.

PATIENT

Flynn Lochary
Current Medications: None.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Patient was sedated with Dexdomitor
Stat Report: Not requested.

SPECIES

Canine

BREED

French Bulldog

SEX

Neutered Male

AGE

4/3/12

WEIGHT

20 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Perry Hall AH

REFERRING VET

Dr. Miller

INVOICE

40050

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.

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.

The left kidney has a normal shape and size (4.3 cm). Overall echogenicity is normal with mildly reduced 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.

The right kidney has a normal shape and size (4.49 cm) with pinpoint non-obstructive nephroliths. Overall echogenicity is normal with mildly reduced 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, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal/borderline "plump", measuring 0.78 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.

The right adrenal gland is normal/borderline "plump", measuring 0.86 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 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. There is a heterogeneous, slightly hyperechoic mass effect visualized on the spleen measuring 2.26 cm x 1.82 cm. This lesion is solid and mildly deviates the splenic capsule.

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.

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

The stomach is moderately dilated with fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a uniform diameter with minimal fluid distension. Wall thickness is increased. Bowel loops follow a typical curvilinear path. Some areas have reduced detail of wall layering. Jejunum wall measured 0.34 cm. Duodenum wall measures 0.65 cm with mucosal speckling noted. 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.

Brief cardiac evaluation

Focal Iso/hypoechoic abnormal tissue is visualized at the right heart base, measuring approximately 2.22 cm x 2.26 cm, evident adjacent to the aorta /rt. auricle which is concerning for a heart base mass. (consider chemodectoma/aortic body tumor, less likely metastasis)

No significant pericardial effusion was seen at this time, contractility is subjectively normal.

Full echocardiogram recommended (possible CT?)

PRIMARY FINDINGS

- Solid, heterogeneous mass effect within the splenic parenchyma – A focal, solid, mixed echogenic mass is present within the splenic parenchyma. This mass distorts the splenic capsule. Differentials include benign lesions such as lymphoid hyperplasia, hemangioma, etc., or neoplastic lesions such as hemangiosarcoma, lymphoma, histiocytic sarcoma, etc.
- Subjectively thickened small intestine with mucosal speckling noted in the duodenum – Bright mucosal speckling has been proposed to represent dilated lacteals or focal accumulation of mucus, cellular debris etc.. in the mucosal crypts of the small intestine.
- Irregular appearance to the right heart base – concern for a possible mass effect. Consider a full cardiac ultrasound and a possible thoracic CT scan. This could represent a metastatic lesion (If the splenic mass is neoplastic) alternately this has characteristics most consistent with represent a chemodectoma or benign heart base mass.

SECONDARY FINDINGS

- Borderline “plump” adrenal glands – The bilateral adrenomegaly could be consistent with bilateral hyperplasia (e.g., secondary to pituitary-dependent hyperadrenocorticism), bilateral infiltrative neoplasia, inflammatory adrenal disease, other. Correlation with clinical findings is recommended.
- 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.
- Moderate gallbladder debris – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.
- Moderate ingesta within the gastric lumen – correlate with feeding history. If the patient was adequately fasted, then consider the possibility of delayed gastric emptying or gastric outflow obstruction (none observed).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

An irregular lesion/mass effect is visualized associated with the spleen. This is non-cavitated, but it does disrupt the splenic capsule somewhat. This could represent a benign or a neoplastic lesion. Consider a fine needle aspirate.

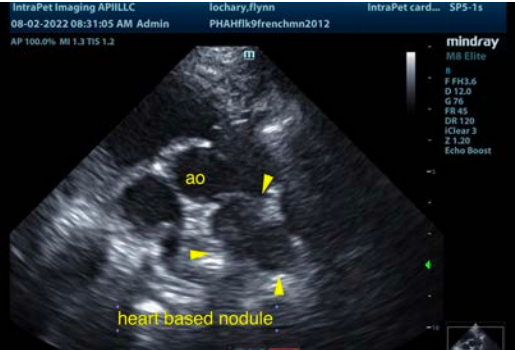
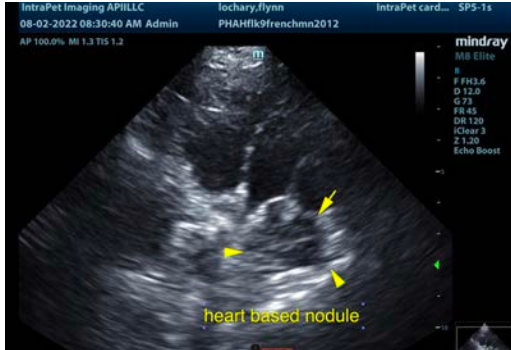
Additionally, there is a heart base mass which could represent a slow-growing lesion (chemodectoma etc..) or less likely could represent a metastatic lesion if the splenic lesion is cancerous.

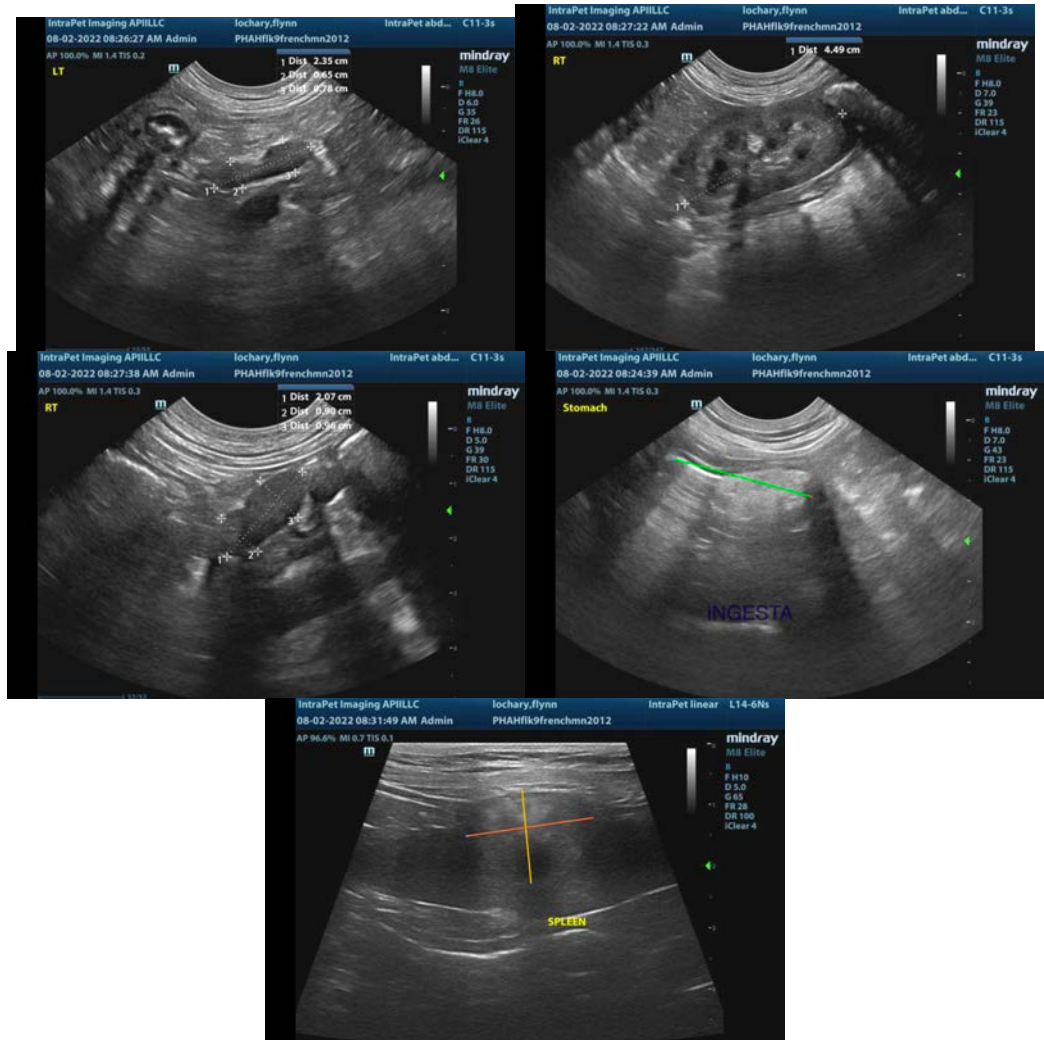
While both of these lesions (cardiac and splenic) could represent serious conditions, It is also very possible that they both could be incidental findings with benign lesions, so sampling and further evaluation is warranted. A contrast CT scan may be necessary to further evaluate the heart base mass lesion.

Both adrenal glands appear somewhat “plump”. Consider a blood pressure evaluation, and if signs of Cushing’s are present, adrenal function testing could be considered in the future when this patient is feeling better.

The pancreas appears somewhat prominent, and the small intestine appears subjectively thickened with some mucosal speckling. This could be an indicator of underlying small intestinal disease. Recommend a GI panel to Texas A&M for a qualitative PLI, TLI, cobalamin and folate to further evaluate the pancreas and small intestine.

- Recommend a novel protein/hydrolyzed protein prescription diet.
- Recommend chronic probiotic therapy.
- If diarrhea persists, consider obtaining GI biopsies. This could be considered at the time of splenectomy if this route is pursued.





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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