**DATE**

5/10/22

**PRESENTING CLINICAL SIGNS**

Seen at Falls Road for pancreatitis, was diagnosed with cranial abdominal mass. Ultrasound (done by them) found hepatic mass (Dr Polf). Surgery was done by Dr Havemann and removed right lateral lobe of liver and 2 hepatic lymph nodes. Pathology reported adenoma, reactive LN's. One and a half weeks ago developed PU/PD.

**PATIENT**

Lila Gavino

Current Medications: Thyroxine 0.4mg BID, Clavamox 500mg BID

Lab Results: Moderate increase in ALT, ALP, mild increase in Calcium. No diabetes mellitus, no urinary tract infection.

**SPECIES**

Canine

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, RDMS.

**BREED**

Pitbull Mix

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder is mildly distended with anechoic urine. The bladder wall is subjectively diffusely thickened and measured 0.71 cm. There is minimal mucosal irregularity. The area of the trigone, ureteral papillae and proximal urethra appear normal with mass effects or calculi. The findings are most consistent with lack of urine distension or mild cystitis.

**AGE**

1/16/10

The left kidney has a normal shape and size/slightly plump (5.86 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**

76 lbs

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 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 0.68 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.

**HOSPITAL NAME**

Abbey AH

The right adrenal gland is borderline large in size measuring 1.05 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.

**REFERRING VET**

Dr. Kluttz

**Spleen**

The spleen is subjectively normal in size and the echotexture is homogenous. The splenic capsule is smooth with no visible irregularities. Rare discrete focal hyperechoic, perivascular parenchymal abnormalities are present. The appearance of these lesions is most consistent with benign splenic myelolipomas. The blood flow through the hilus and splenic parenchyma appears normal.

**INVOICE**

30226

**Liver**

The liver is subjectively large in size and slightly irregular in shape with smooth peripheral margins. The parenchyma is 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 gallbladder

lumen is moderately distended. The wall of the gallbladder 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 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 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. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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 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***

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.

## **ULTRASONOGRAPHIC FINDINGS**

### **PRIMARY FINDINGS:**

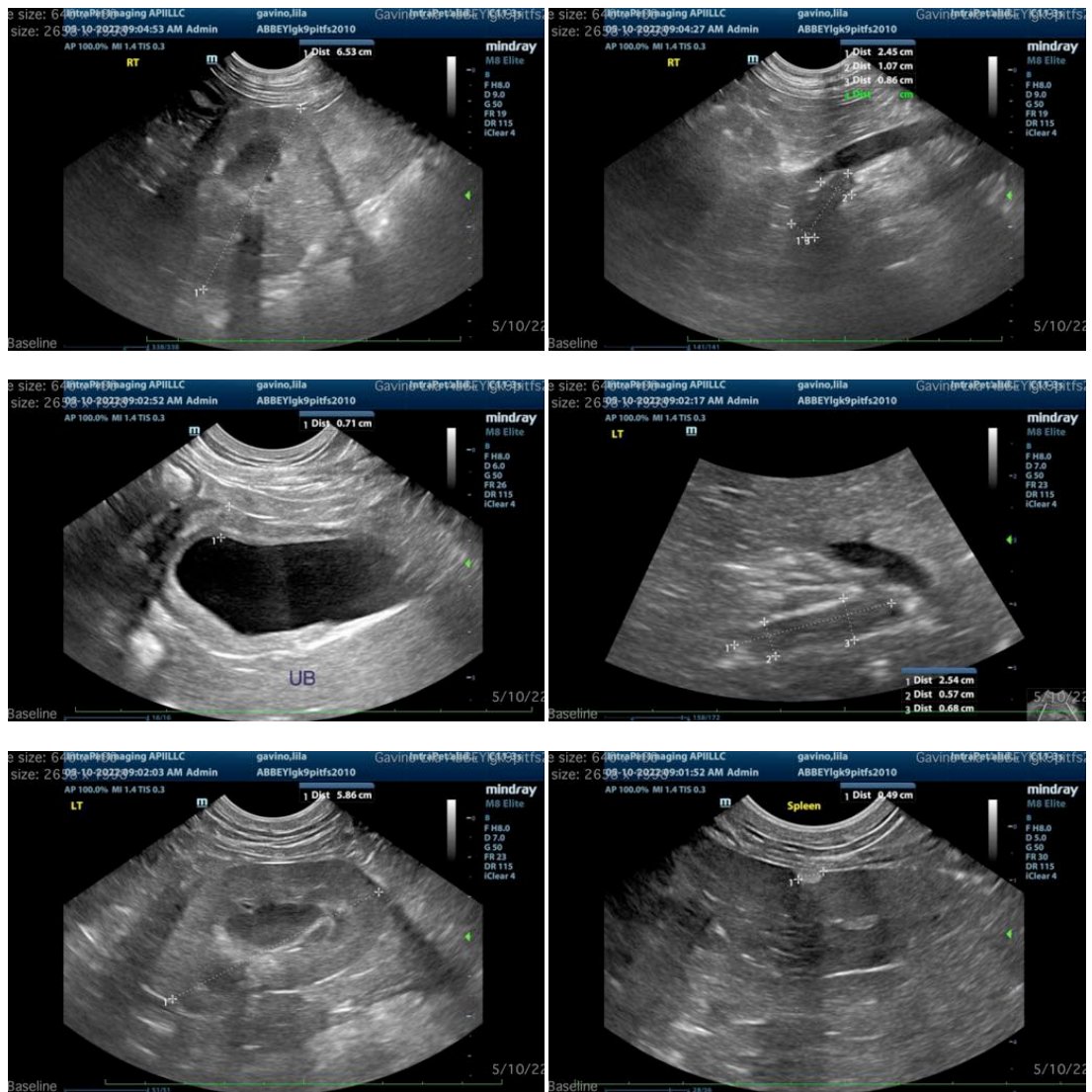
- Large, irregular heterogenous liver. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. The irregular shape is likely associated with the previous surgery.
- Moderate shadowing gastric ingesta.
- Borderline bilateral adrenomegaly. 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.
- Questionable bladder wall thickening. The findings are most consistent with either lack of urine distension or mild cystitis. I recommend urinalysis and culture.

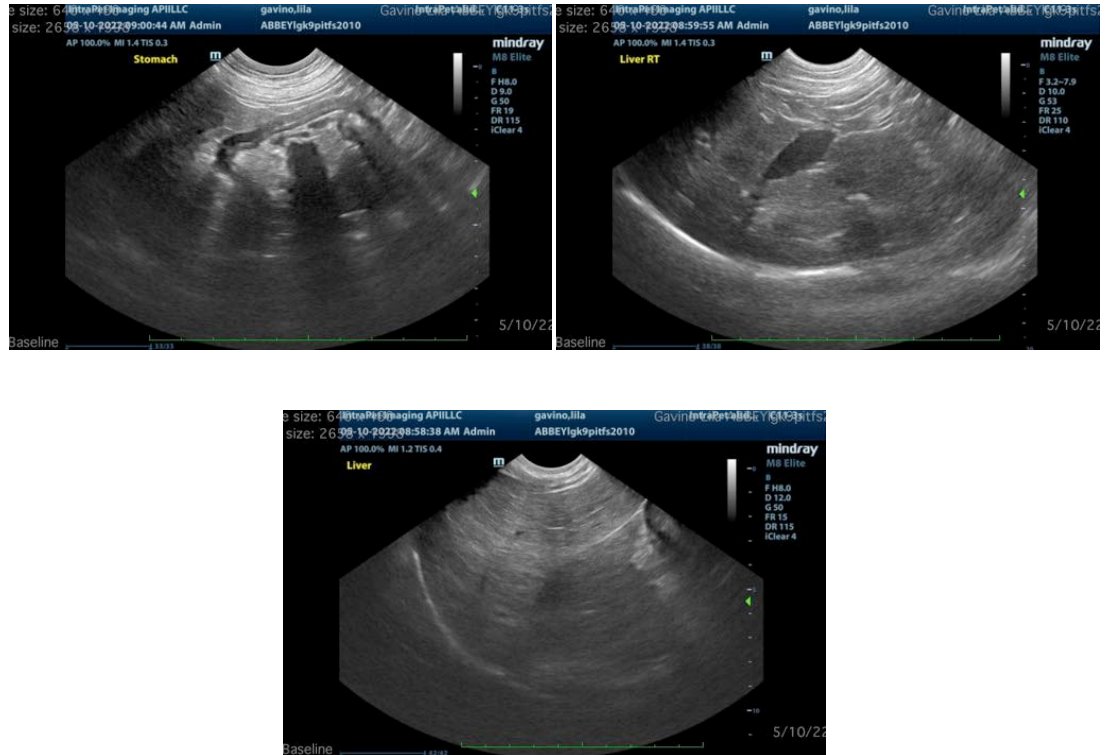
### INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Despite having a liver lobe removed the liver still appears generous in size and heterogenous. The adrenal glands have a borderline “plump” appearance. I recommend a liver function test and if other signs of Cushing’s are present you can consider adrenal function testing. If liver function is abnormal then I recommend a FNA of the liver or possibly biopsy to obtain more architectural detail.

I recommend a urinalysis and culture to both investigate the subjective mild bladder wall thickening and to evaluate as a cause for PU/PD.

I recommend an ionized calcium. If this is elevated then consider PTH and PTHrP levels in addition to three view thoracic radiographs.





The information and recommendations provided are based on the images presented by the referring veterinarian. 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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