

**DATE PRESENTING CLINICAL SIGNS**

3/30/23

P presents for lethargy. Pet is in heat per client; heat started about 2 weeks ago. O states P had diarrhea yesterday. O states P has been incoherent for the past couple of days. E/D normally. No C/S/V

PATIENT

Heaven Pettaway

Current Medications: Rx: Provable Forte Dispensing Kit Feline/Small

Give 2mls of Provable gel by mouth twice a day for 3 days

Sprinkle one capsule on food once daily until gone. Rx: Clavamox 125mg Chewable Tablet Give 1 chewable tablet every 12 hours for 14 days

SPECIES

Canine

Radiographs: See attached report

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Approved/requested.

BREED

Shih Tzu

Imaging Performed By: Stephanie Warga RDCS, RVT.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Intact Female

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.

AGE

7/9/12

The left kidney has a normal shape and size (3.98 cm) with numerous small nephroliths, one of which measures 0.39 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, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

11.2 Pounds

The right kidney has a normal shape and size (4.37 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.

INTERPRETED BY

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

Adrenal Glands

The left adrenal gland is normal in size measuring 0.48 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

Banfield Towson

The right adrenal gland is normal in size measuring 0.53 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. Chadha

Spleen

The spleen is large and irregular in shape. The spleen echotexture is heterogenous and mottled. The blood flow through the hilus and splenic parenchyma appears normal. There is a very large, elongated, multilobulated mass effect arising from the spleen that is hypoechoic and heterogeneous, measuring approximately 10.21 cm x 2.7 cm. There is a prominent cranial portion to this mass effect that measures 6.42 cm in diameter, and a prominent caudal aspect that measures 3.35 cm x 6.33 cm.

INVOICE

46256

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is mildly 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 gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. 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. 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. Jejunum wall measures 0.36 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 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

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 hyperechoic around the splenic mass.

Other

The right auricle and pericardium were visualized and were unremarkable. No obvious pathology is visualized. If cardiac function evaluation is desired a full echocardiogram is warranted.

Both the left and right ovaries are visualized. The left measures 2.42 cm in length and the right measures 1.42 cm in length, with small cystic regions. Additionally, the uterine body is visualized at the level of the urinary bladder, and a horn is visualized in the mid abdomen. These appear large but do not have significant fluid distention. Uterine body diameter is 1.16 cm.

ULTRASONOGRAPHIC FINDINGS

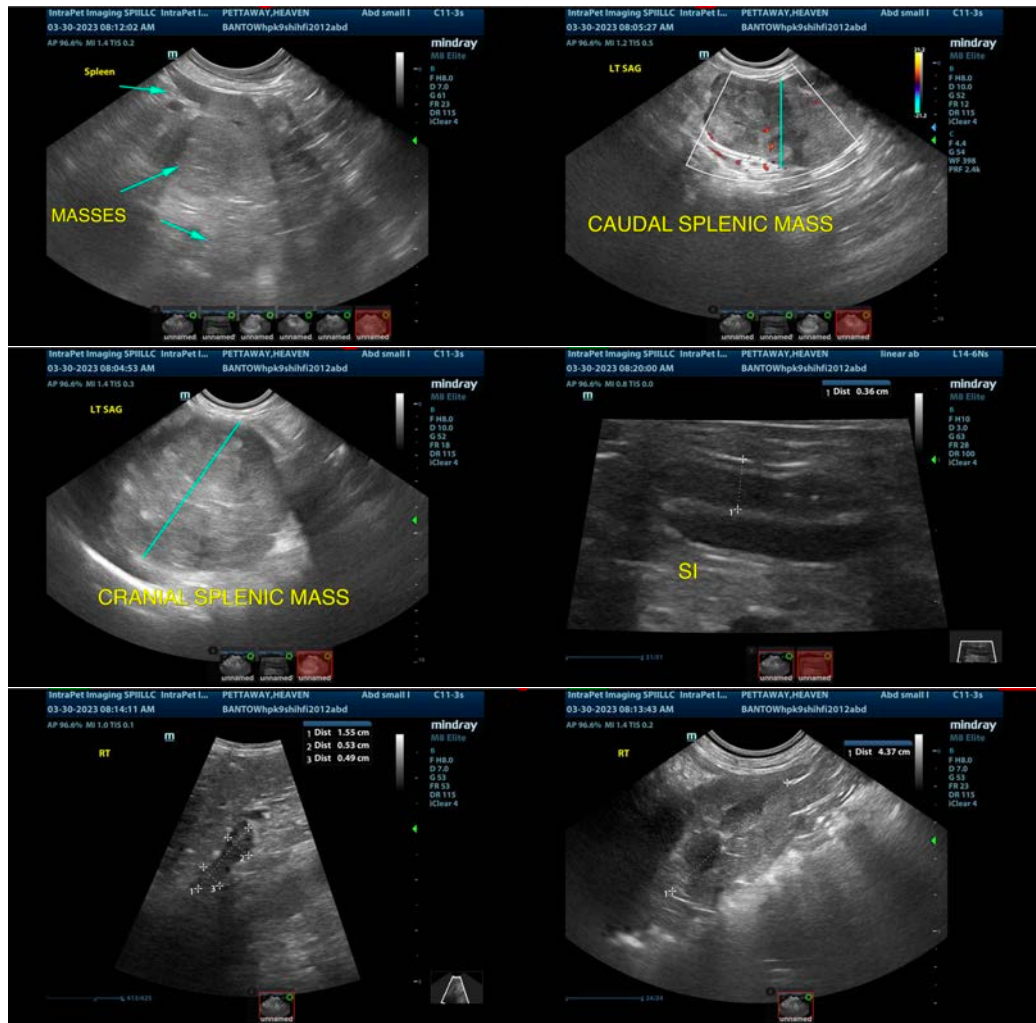
- Large, multilobulated, heterogeneous and hypoechoic mass effect arising from the spleen – A focal solid mixed echogenicity mass is visualized associate with the spleen. This mass distorts the splenic capsule. Differentials include : benign lesions (lymphoid hyperplasia, hemangioma etc..) or cancerous lesions (hemangiosarcoma, lymphoma, histocytic sarcoma etc..)
- Mildly 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.
- Non-obstructive nephroliths visualized in the left kidney – The hyperechoic mineralized foci observed at the corticomedullary junction of the left/right kidney are consistent with small, non-obstructive nephroliths.

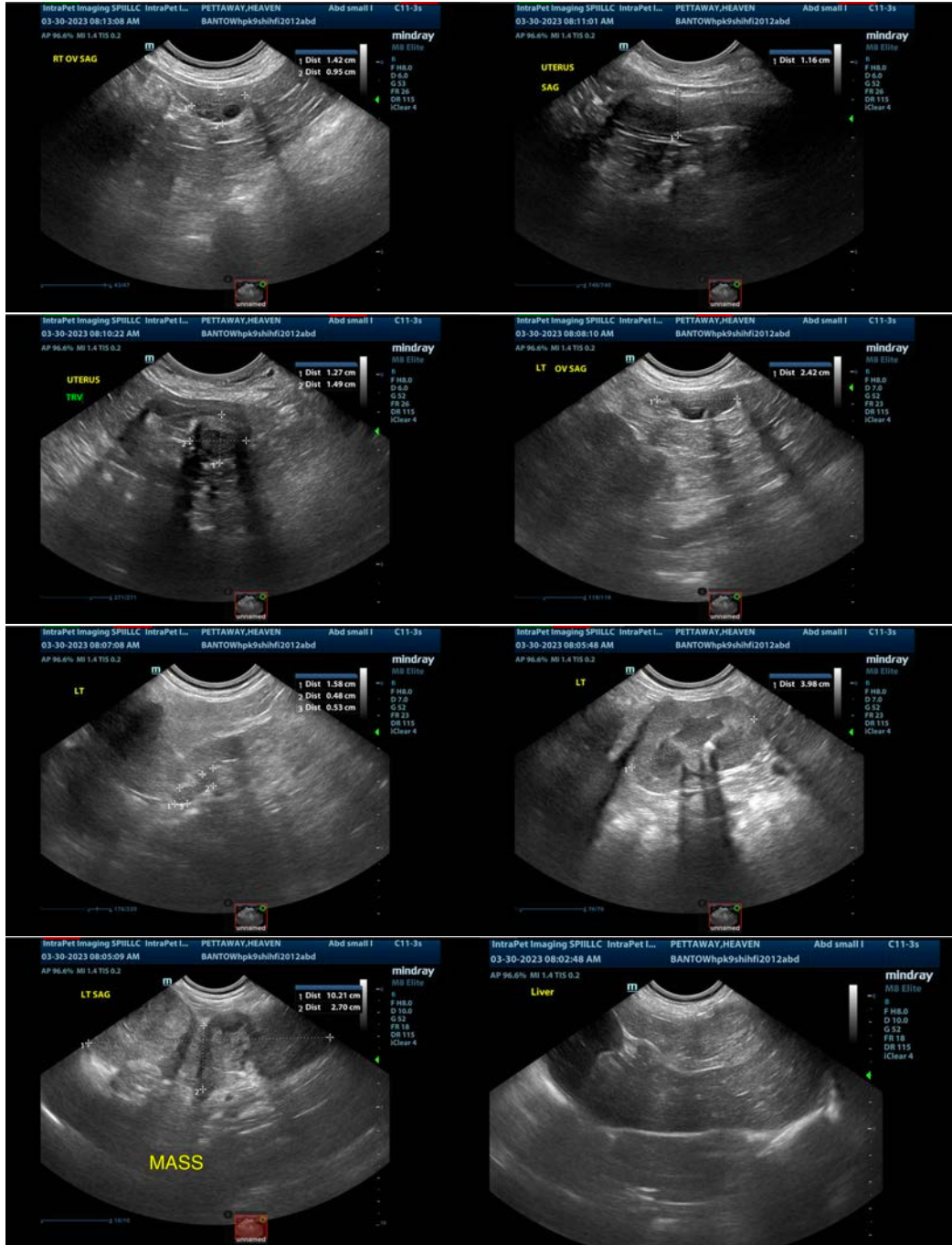
- Prominent uterus with cystic ovaries – Findings are consistent with an intact female in heat.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large, multilobulated mass effect that appears to be arising from the spleen. This could represent a benign or neoplastic lesion. Additionally, the uterus appears enlarged and prominent. Recommend splenectomy for both diagnostic and therapeutic purposes, as well as an ovariohysterectomy, to rule out the possibility of current or impending metritis/pyometra, etc.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com