

**DATE PRESENTING CLINICAL SIGNS**

4/18/23 Hx of hyperthyroidism, having additional weight loss despite improved BW and now not eating well. PE- mass effect at root of mesentery and thickened intestines.

PATIENT

Kali Gilpin
 Current Medications: Methimazole 5mg BID.
 Date of Previous IntraPet Ultrasound: No previous.
 Sedation: Gabapentin PO.
 Stat Report: Not requested.
 Imaging Performed By: Stephanie Warga RDCS, RVT.

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

DSH

SEX

Spayed Female

AGE

10/11/08

WEIGHT

7 Pounds

INTERPRETED BY

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

HOSPITAL NAME

Happier at Home
 Mobile Vet Hospital

REFERRING VET

Dr. Haskin

INVOICE

46736

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 left kidney has a normal shape and size (3.09 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.

The right kidney has a normal shape and size (3.24 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.39 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 in size measuring 0.34 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 (0.88 cm), 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.

Liver

The liver is subjectively normal in size, and echogenicity 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 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 <0.36cm 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 uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.30 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized. There appears to be a focal bowel mass with significant wall thickening measuring at 0.95 cm, encompassing approximately 2.65 cm of bowel. This area appears to be proximal colon and associated with the ileocecal junction. There is a severe lymphadenopathy and hyperechoic mesentery surrounding this area.

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

There is scant free abdominal fluid. There is a severe mesenteric lymphadenopathy with a cluster of large, hypoechoic, irregular lymph nodes near the ileocecal junction, creating a mass effect. This mass effect measures approximately 3.05 cm x 2.91 cm in diameter and is multilobulated, consisting of several enlarged mesenteric lymph nodes. This region is surrounded by hyperechoic mesentery.

ULTRASONOGRAPHIC FINDINGS

- 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.
- Severe focal thickening and loss of layering of bowel at the ileocecal junction – Findings are concerning for infiltrative neoplasia (round cell neoplasia, carcinoma, etc.). Other differentials are possible.
- Severe focal lymphadenopathy at the ileocecal junction – The severe mesenteric lymphadenopathy is most concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease (tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.

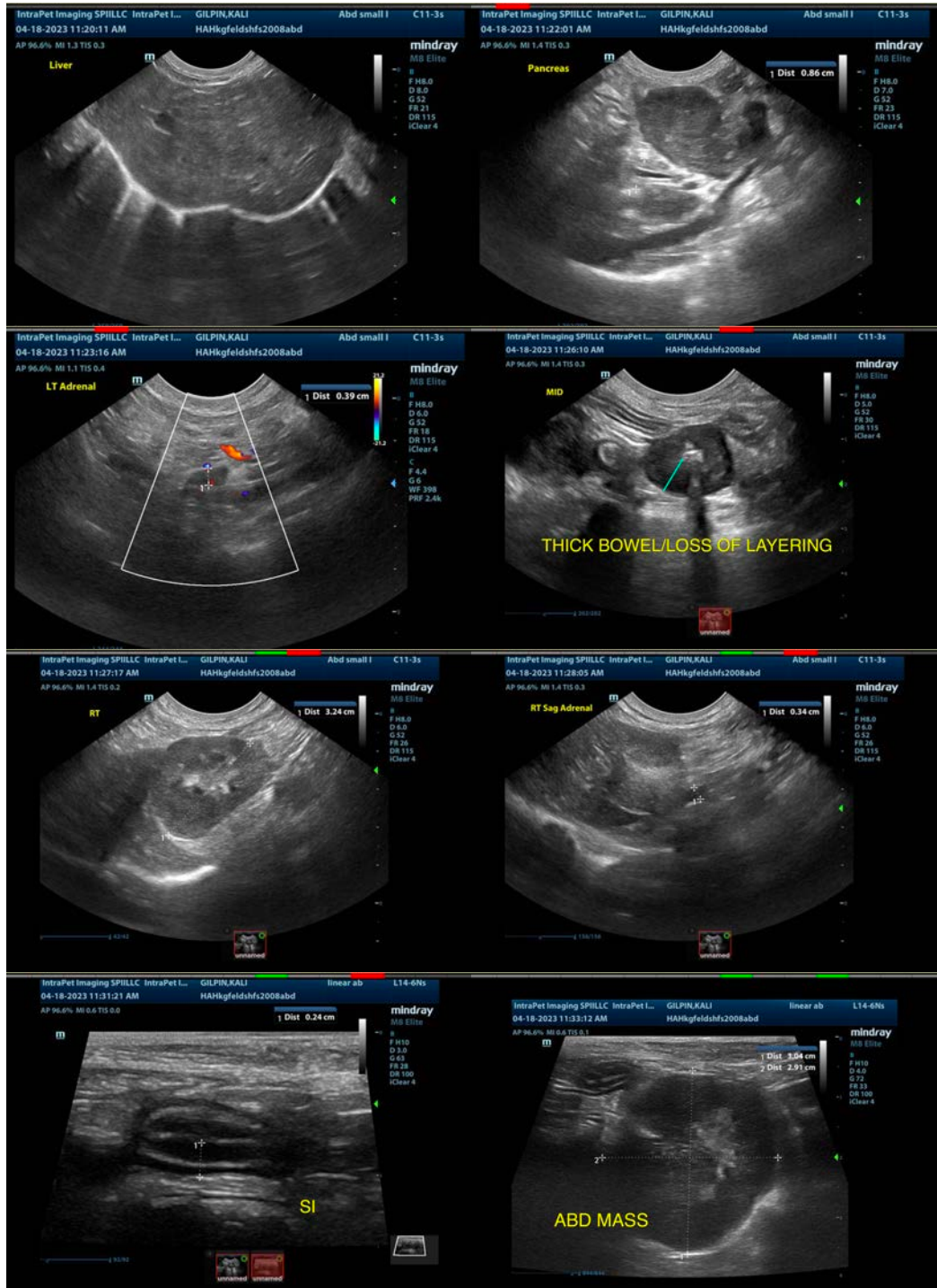
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

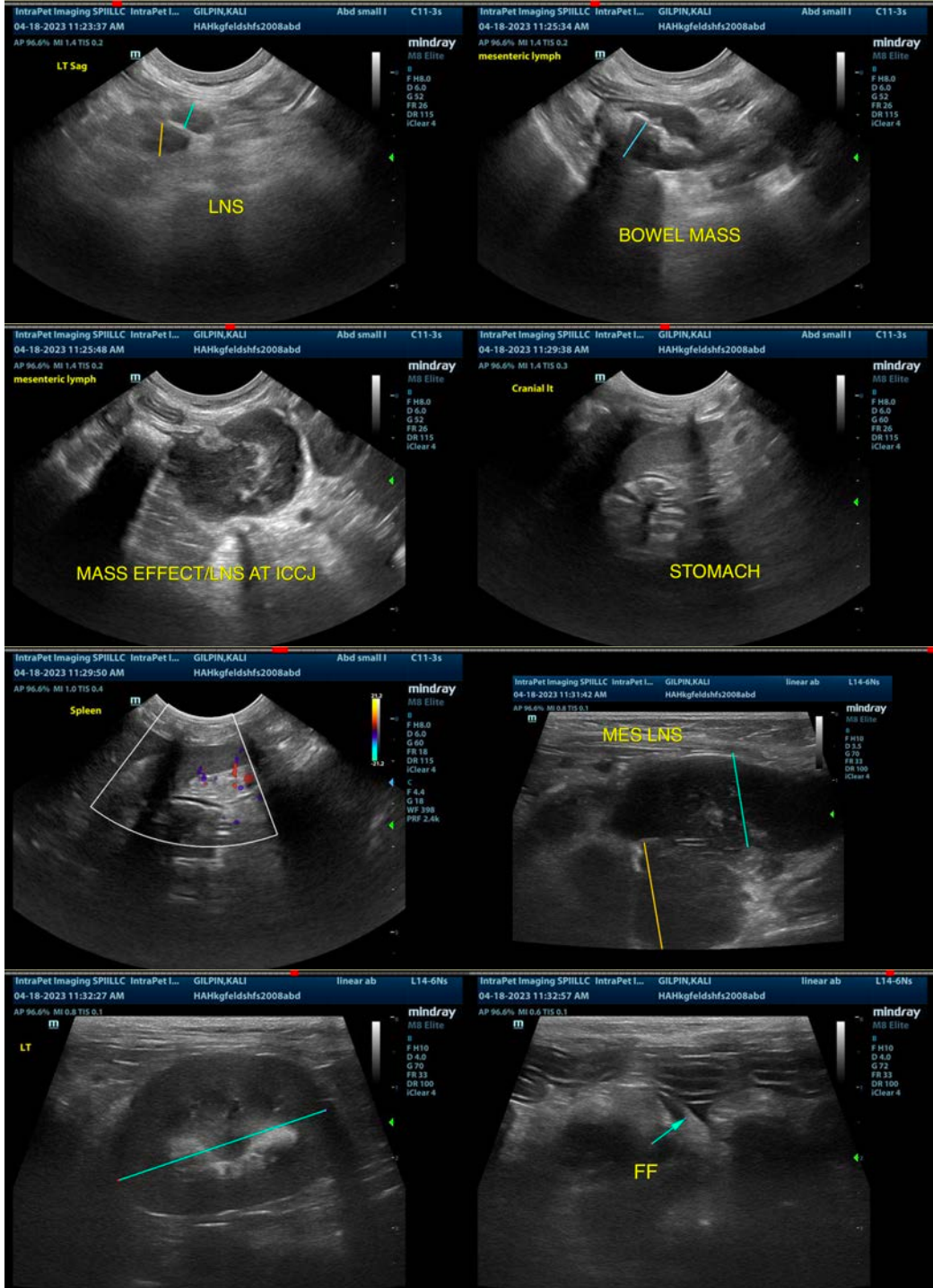
The region of the ileocecal junction is very abnormal in that there is severe bowel thickening with complete loss of layering in this region, as well as a severe mesenteric lymphadenopathy consisting of a cluster of large hypoechoic lymph nodes coalescing into a large mass effect. These findings are highly concerning for metastatic neoplasia (round cell neoplasia, carcinoma, etc.), although other differentials exist (FIP, etc.).

Consider a fine needle aspirate of the abdominal mass/mesenteric lymph node. If round cell neoplasia is diagnosed, consultation with a veterinary oncologist could be considered regarding treatment options. Some chemotherapeutic options could be oral and relatively mild. Additionally, palliative therapy with steroids and

GI medications could be considered. If a carcinoma is diagnosed, then treatment options would be more limited, and palliative therapy would likely be the primary option.

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.

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