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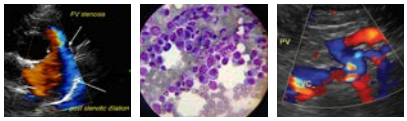

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DATE

12/22/22

PATIENT

Tuna Grover

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

9/19/13

WEIGHT

9/19/13

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Abbey AH

REFERRING VET

Dr. Kuhlman

INVOICE

43693

PRESENTING CLINICAL SIGNS

History of polydipsia. On cystocentesis a suspected mass was visualized near bladder.

Current Medications: None.
Lab Results: +1 protein in urine. Chem/CBC/T4 WNL.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

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 left kidney has a normal shape and size (3.14 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 (3.44 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 0.40 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 0.33 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 (1.01 cm in width at the level of the hilus). The spleen echotexture is heterogenous and mottled, 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 large in size, and normal in 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 0.24 cm. Visualized peristalsis appears appropriate. There are some areas of small intestine that appear more thickened and have reduced distinction of wall layering. In these area, the wall measures at 0.27 cm.

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 hypoechoic as 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

There is a small amount of free abdominal fluid. There is a diffuse lymphadenopathy with a large, irregular, hypoechoic mass effect visualized at the root of the mesentery measuring 3.73 cm x 3.03 cm, most consistent with either a large lobulated lymph node or a grouping of lymph nodes. The omentum is generally hyperechoic.

Other

A brief view of the heart was submitted. No significant pericardial effusion was seen.

There is a discrete hypoechoic rounded mass effect in the cranial mediastinum, measuring 3.23 cm x 1.76 cm, most consistent with mediastinal mass. Additionally, there is pleural effusion noted.

PRIMARY FINDINGS

- Large, mottled spleen – 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.

- Large, 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.

- Areas of thickened small intestine with reduced detail of wall layering – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).

- Large, irregular, hypoechoic mass effect at the root of the mesentery and a diffuse lymphadenopathy – Findings are most concerning for an effaced lymph node. Round cell neoplasia would be a primary differential, although other differentials exist.

- Mediastinal mass – Primary differential would be lymphoma, although thymoma and other differentials are possible.

- Pleural and peritoneal effusion

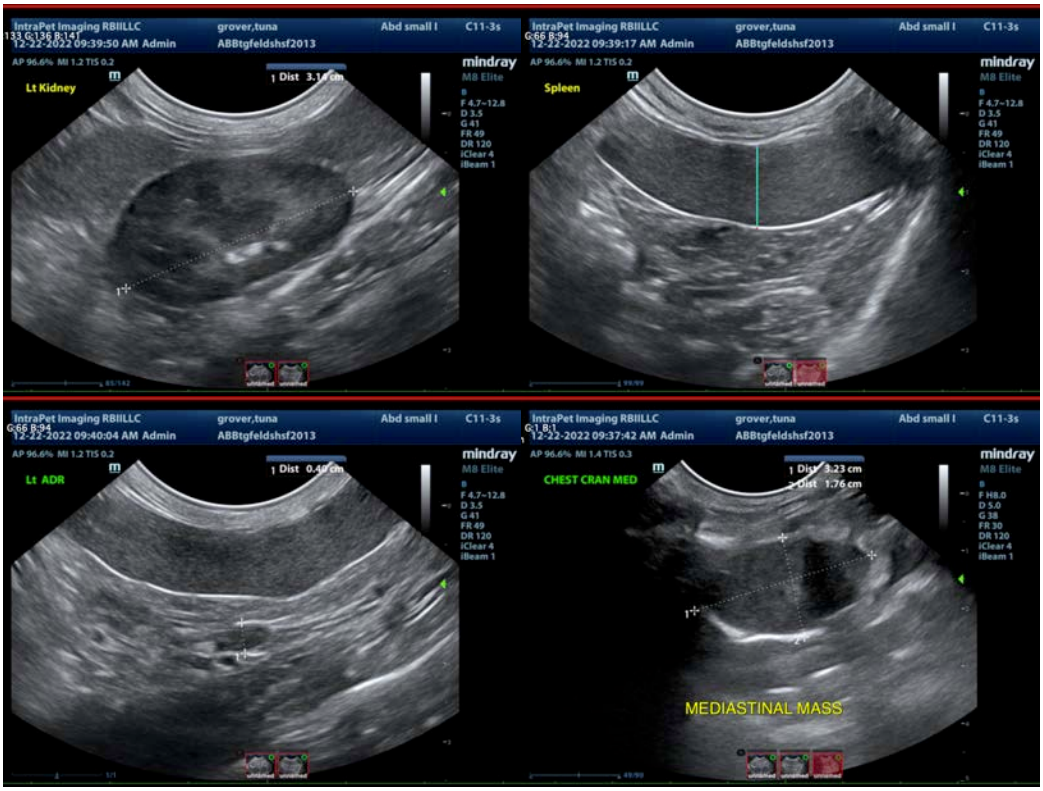
SECONDARY FINDINGS

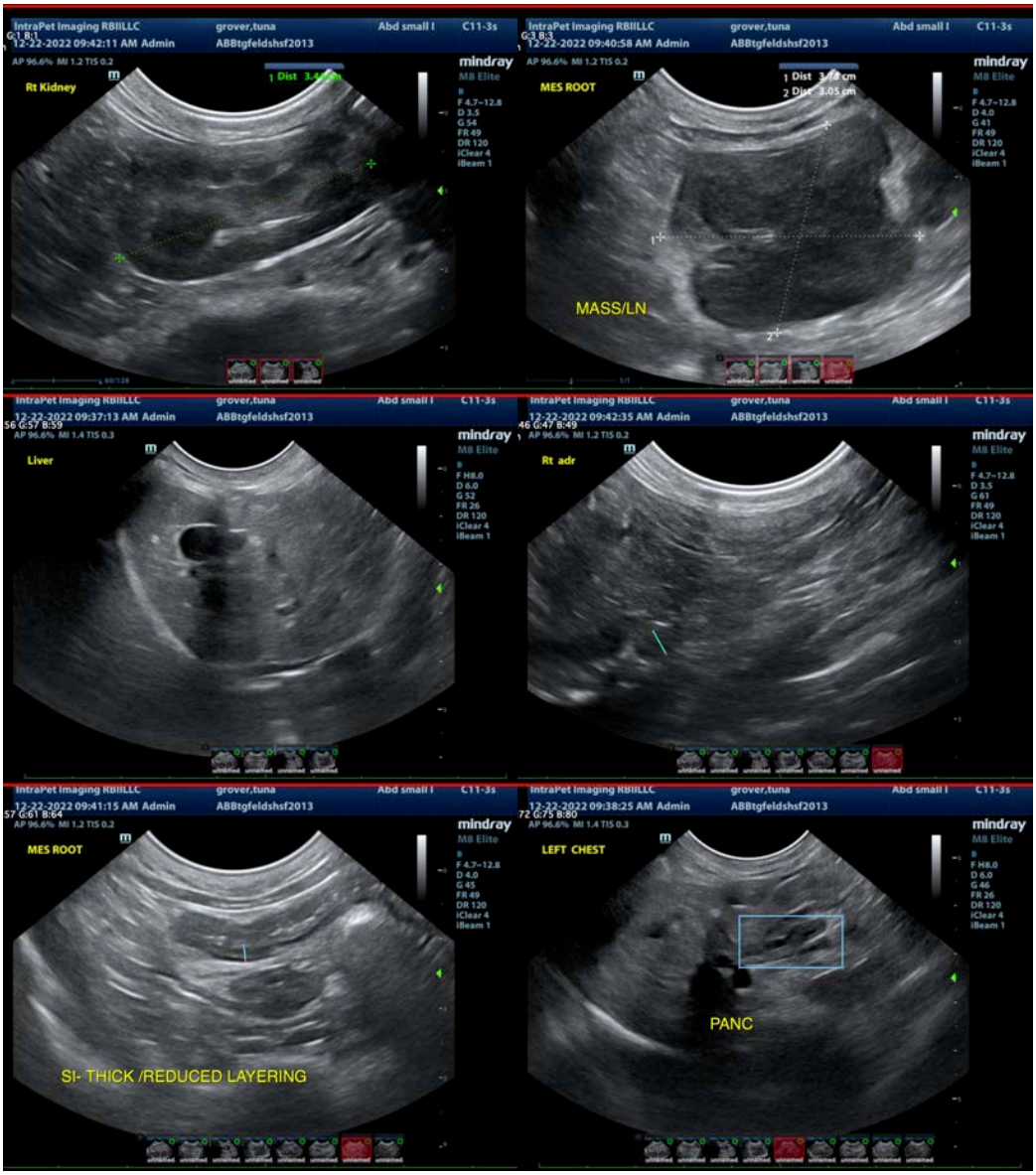
- Prominent, hypoechoic pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large mid abdominal mass effect at the root of the mesentery, most consistent with a large effaced lymph node or a grouping of very large lymph nodes. Additionally, the liver and spleen are large and irregular, and there are areas of small intestine that appear somewhat thickened with reduced detail of wall layering. These findings combined with the mediastinal mass noted are very concerning for diffuse round cell neoplasia, although other differentials exist. Recommend a fine needle aspirate of the mass effect at the root of the mesentery. If a cytologic diagnosis cannot be obtained based on this sample, then consider sampling a lymph node, spleen, and liver.

Recommend 3-view thoracic radiographs to further evaluate the mediastinal mass. A fine needle aspirate of this lesion could be considered, but I suspect if a cytologic diagnosis can be obtained from the abdominal samples, this would likely correlate. Recommend consultation with a veterinary oncologist regarding treatment plan and prognosis once a cytologic diagnosis is obtained.





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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