

**DATE PRESENTING CLINICAL SIGNS**

3/11/22 1 week vomiting and poor appetite, resolving but is hiding and small gauge metal wire fb on radiographs. ALT elevation 220.

PATIENT

Petunia Scrivnor

Current Medications: Has had cerenia (now dx). Starting IV fluids, restarting Cerenia, and Abic's, Buprenex.

Lab Results: ALT 220, no inflammatory leukogram.

Radiographs: Fine 1 inch metallic.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Requested/Approved.

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

3/7/16

WEIGHT

18 Pounds

INTERPRETED BY

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IMAGING PERFORMED BY

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HOSPITAL NAME

Eastern AH

REFERRING VET

Dr. Warner-Jones

INVOICE

36087

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 (4.63 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.

The right kidney is normal in size (3.6 cm) and irregular shape. An infarct is noted in the caudal pole. 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, or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.46 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 0.37 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. No focal parenchymal abnormalities are visualized.

Liver

The liver is large in size with smooth peripheral margins. The parenchyma is hyperechoic and homogenous in echotexture. 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 primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains a small amount of shadowing 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. Duodenum wall measured 0.28 cm. Jejunum wall measured 0.22 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. There is a moderate to large amount of solid, shadowing stool in the colon. 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.

PRIMARY FINDINGS

- Large, hyperechoic liver – Hepatic changes are non-specific and could be consistent with hepatic lipidosis, inflammatory/infectious disease, infiltrative neoplasia, or other hepatopathy.
- Prominent muscularis layer to the small intestine

SECONDARY FINDINGS

- Old infarct in the caudal pole of the right kidney

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

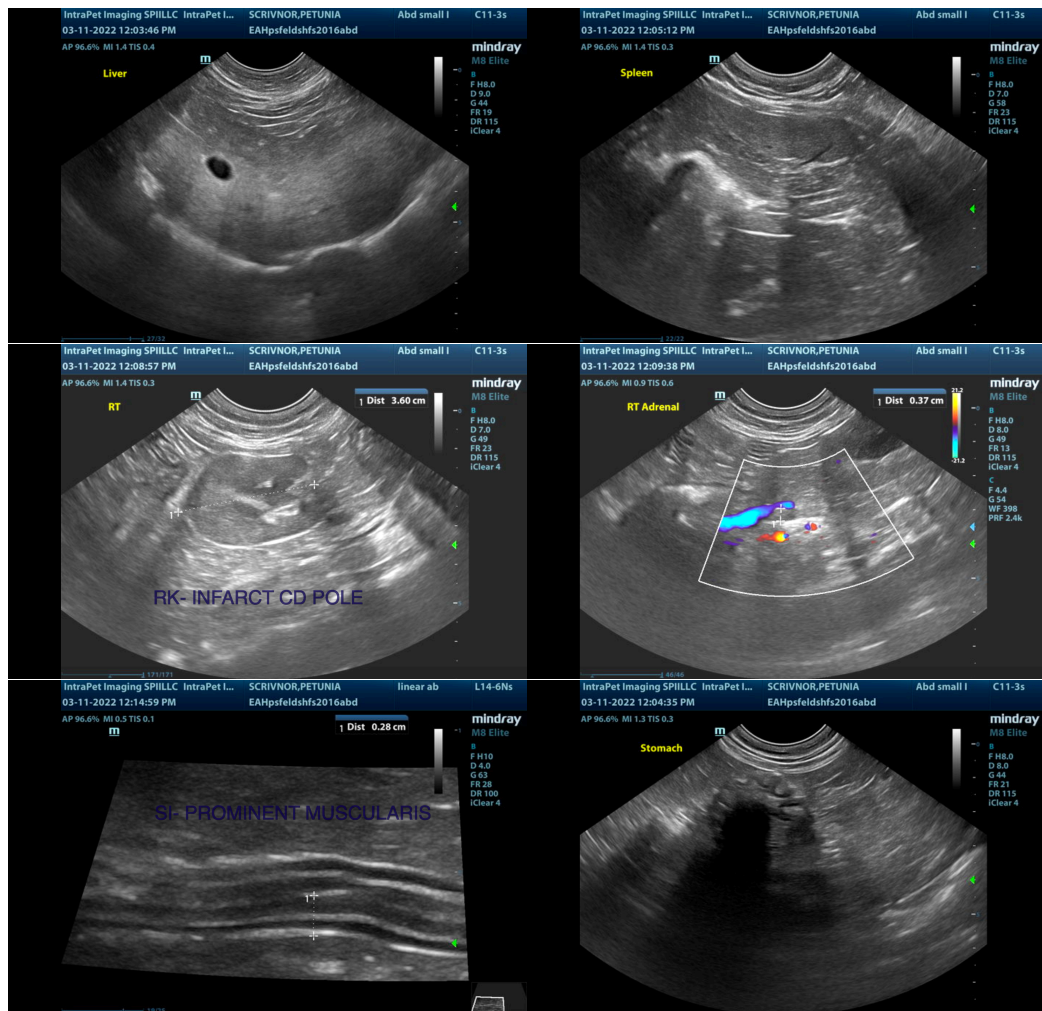
No significant focal lesions are visualized associated with the gastrointestinal tract to explain the vomiting and inappetence reported. Additionally, there are no focal lesions visualized in the liver to explain the elevation in ALT. It is somewhat large diffusely and hyperechoic. This can be associated with fat deposition in larger cats, but could also be a reflection of a primary hepatopathy, or a secondary hepatopathy due to underlying GI disease, GI foreign material, etc.

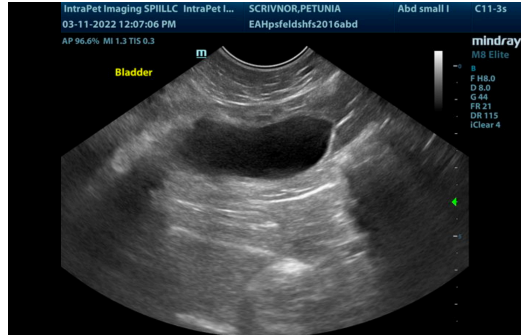
- Consider close evaluation of history for possible toxic changes examine medications, diet, dietary indiscretion etc..
- Recommend thyroid evaluation (if not already done)
- If not already done consider pre and post prandial bile acids to evaluate liver function
- Consider fine needle aspirate if round cell neoplasia is on your differential list (25 g needle, normal coags)

There is a mild increase in prominence of the muscularis layer. This can be an incidental finding in some cats. In others, it can indicate some inflammation. There is no evidence of a wire foreign body observed on ultrasound, but this could potentially be very difficult to see with this imaging modality.

If surgery is considered to evaluate for this object, then consider obtaining GI and liver biopsies at the time of surgery. If surgery is not considered, you could send out a GI panel to Texas A&M for a qualitative fPLI, TLI, cobalamin and folate to further evaluate for any evidence of pancreatic inflammation or underlying small intestinal disease.

Recommend serial monitoring of the wire foreign body with radiographs.





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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