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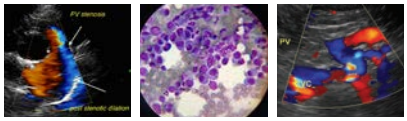

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DATE

12/8/21

PATIENT

Madison Hall

SPECIES

Canine

BREED

German Shepherd

SEX

Intact Female

AGE

2/21/13

WEIGHT

71 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Airpark AH

REFERRING VET

Dr. Marcizewski

INVOICE

33348

PRESENTING CLINICAL SIGNS

History: Presenting complaint: progressive increase in ALT values since 9-24-2020. On Carprofen 50 mg PO q12 hours, then switched to Galliprant 60 mg PO SID on 10-13-2021 (waited 5-7 days between switching). Throughout these changes, patient has been eating and drinking normally with normal fecal output. Pet has been showing lower urinary tract signs-pollakiuria since 11-19-2021, unable to obtain urine sample for analysis at that time-treated empirically with Clavamox for 14 days.

History: Pannus, medically managed with Tacrolimus (since 10-2017); bilateral hip dysplasia (diagnosed 9-2020); Degenerative Myelopathy, Referral to Neurologist, MRI performed (9-2020).

Current Medications: Galliprant 60 mg PO q24 hours
Amoxicillin/Clavulanate 500 mg/125 mg PO q12 hours for 14 days.
Lab Results: (9-24-2020): ALT 160, (10-13-21): ALT 237, (11-23-21): ALT 597. Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is largely 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 (6.86 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.

The right kidney has a normal shape and size (7.11 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.72 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 0.9 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 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 primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach appears moderately dilated with fluid and irregular shadowing material, most consistent with normal ingesta and gas. It measures as slightly thickened in some areas at a maximal measurement of 0.75 cm (normal is <0.7 cm) 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. 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.

Other

The left and right ovary are visualized. The left ovary appears somewhat prominent with a large cyst and measures 1.74 cm. The right ovary appears normal and measures 1.76 cm.

The uterus is visualized in the area of the urinary bladder and urethra. It appears somewhat prominent and has a very small amount of intraluminal fluid. It measures 0.67 cm in diameter.

PRIMARY FINDINGS

- 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.

SECONDARY FINDINGS

- Distended urinary bladder – This could be very normal for this patient, or could indicate urine retention, etc.

- Questionably thickened stomach wall – This is a large dog, and wall layering appears intact, so this could be an incidental finding. Recommend reevaluation if signs of vomiting occur.

- Cystic left ovary

- Prominent uterine body with a very small amount of intraluminal fluid – likely within normal limits or could indicate mild metritis.

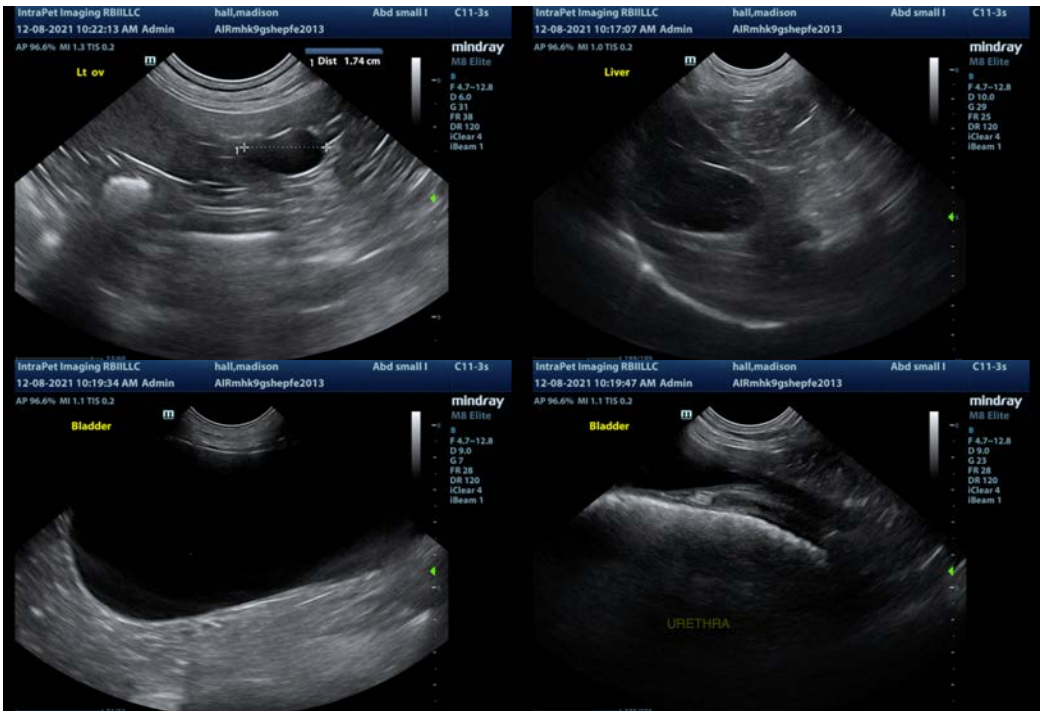
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

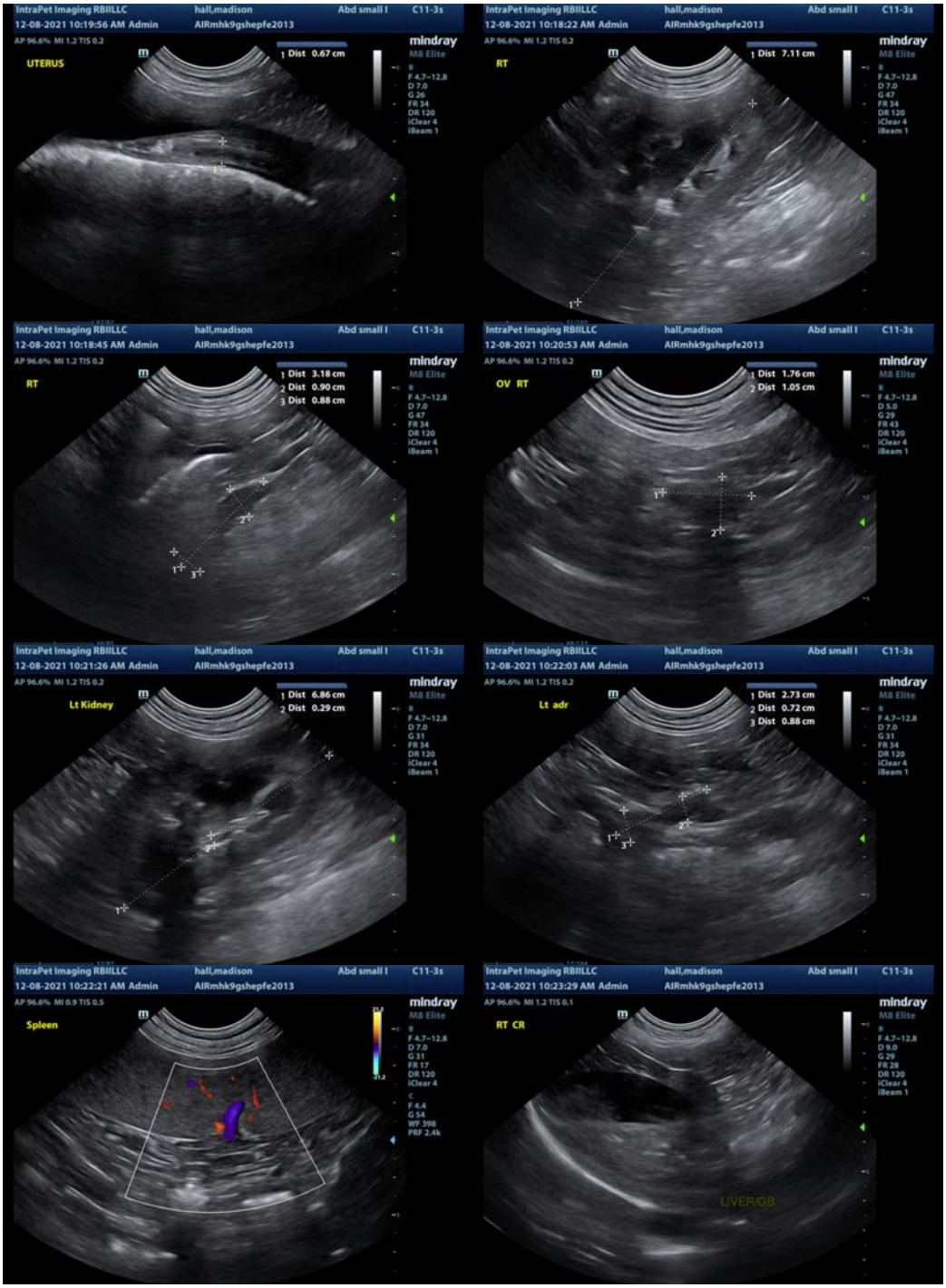
No significant lesions/focal lesions are visualized associated with the liver. In light of the rising ALT elevations, I would consider:

- Consider close evaluation of history for possible toxic changes examine medications, diet, dietary indiscretion etc...
- Consider PCR on urine/serum for leptospirosis (if not on antibiotics)/serology if recent antibiotic history
- 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 differentia list (25 g needle, normal coags)
- If no response to medical care (denamarin, ,+/- ursodiol +/- antibiotics, etc.) Consider liver biopsy with samples obtained for histopathology, culture, and copper levels.

A definitive cause for the reported pollakiuria is not noted. The urinary bladder does appear somewhat distended, but this can be very normal for a hospitalized pet. If symptoms persist, you could consider cystoscopy to further evaluate the urethra. Recommend urinalysis and culture.

There are some mild changes visualized associated with this dog's reproductive tract. Nothing appears significantly threatening, but if clinically appropriate, you could consider a liver biopsy and spay.

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OV RT
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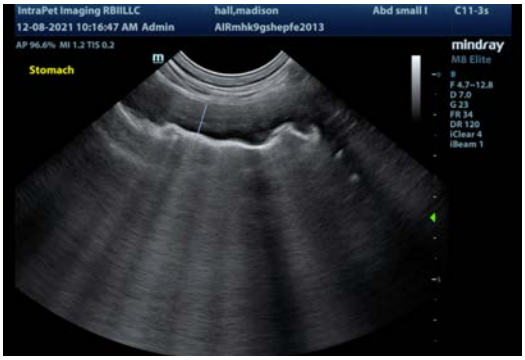

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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