

**DATE PRESENTING CLINICAL SIGNS**

2/15/23

At least 2 year history of ALP elevation. No significant improvement w/denamarin or ursodiol. No clinical signs of endocrine disease, recent labs otherwise show mild cholesterol elevation. TG measurement pending. AUS one year ago showed hyperechoic hepatomegaly and GB sludge. Additional history of skin allergies managed w/cytopoint.

PATIENT

Maggie Harvin

SPECIES

Canine

BREED

Mini Schnauzer

SEX

Spayed Female

AGE

12/25/16

WEIGHT

10.2 kg

INTERPRETED BY

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

HOSPITAL NAME

Nexus Vet Specialists

REFERRING VET

Dr. Steele

INVOICE

45145

Current Medications: Denamarin once daily, Ursodiol 125mg once daily
Cytopoint monthly.

Lab Results: 1/2: ALP 1706 (no chol measured).

11/1: ALP 1122, chol 342.

9/5: ALP 1313.

3/31: SBA pre 1.7, post 29.5 (suspect secondary to cholestasis rather than true hepatic dysfunction), thyroid panel WNL.

3/25: ALP 1520.

11/18/21: ALP 1122, ALT normal 127.

10/21: ALP 618, ALT 141.

Date of Previous IntraPet Ultrasound: 3/31/22. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is mildly distended with anechoic urine. The Bladder wall is diffusely mildly thickened (0.31 cm), and the mucosa is mildly irregular. The trigone, ureteral papillae, and visible urethra (to a depth of 2cm) appear normal with no evidence of severe mucosal irregularities, masses or cystic calculi. Findings are most consistent with bacterial cystitis or lack of urine distension. Recommend urinalysis and culture.

The left kidney has a normal shape and size (4.47 cm) with pinpoint non-obstructive nephroliths. Overall echogenicity is slightly hyperechoic with mildly reduced 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 (4.08 cm) with pinpoint non-obstructive nephroliths. Overall echogenicity is slightly hyperechoic with poor 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 0.75 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 0.51 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 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. There is a small intraluminal structure or mucosal irregularity visualized measuring 0.59 cm x 0.57 cm, which could be a small amount of debris or a polypoid type lesion. The remaining luminal contents are anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains mild fluid. 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 0.39 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 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.

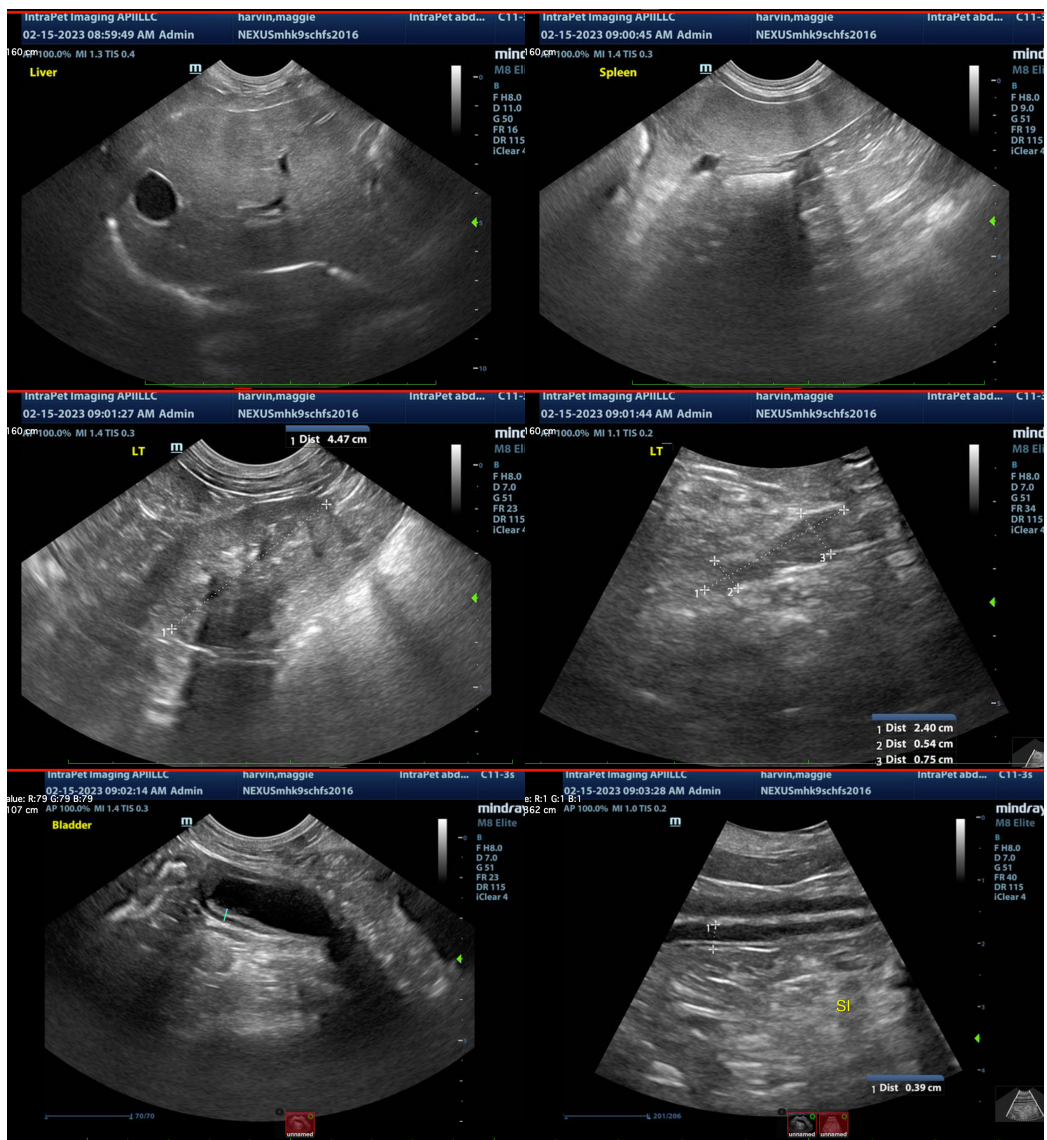
ULTRASONOGRAPHIC FINDINGS

- Large, hyperechoic liver – The diffuse hepatic changes are non-specific and can be seen with vacuolar hepatopathy, reactive change, nodular hyperplasia or, less likely, inflammatory/immune-mediated disease, infiltrative neoplasia, or other hepatopathy.
- Mildly thickened urinary bladder wall with a mildly distended urinary bladder and no visible calculi
- Thickened bladder wall/not full bladder
- Mildly reduced corticomedullary distinction in both kidneys with small non-obstructive nephroliths – The bilateral renal findings are consistent with age-related change.
- Normal gallbladder with minimal intraluminal debris or a small focal object, possibly consistent with a small polyp

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Ultrasonographic findings include a mildly distended urinary bladder with a prominent wall and no evidence of calculi on today's exam, mildly reduced corticomedullary distinction in both kidneys with small non-obstructive nephroliths/mineralizations, a large hyperechoic liver, and a relatively empty gallbladder with a small focal intraluminal structure, possibly consistent with a small polyp.

Further diagnostic and therapeutic recommendations regarding this exam to be made by Dr. Cara Steele.





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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