IMAGING PERFORMED BY

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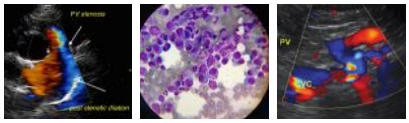


SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

8/20/21

PATIENT

Robbie Healy

SPECIES

Canine

BREED

Maltese

SEX

Neutered Male

AGE

2010

WEIGHT

8.7 Pounds

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Northwind AH

REFERRING VET

Dr. Wilson

INVOICE

12675

PRESENTING CLINICAL SIGNS

History:Patient presented on 8/9/2021 for an annual exam where owner stated that patient was ADR. Lost interest in walks, dec appetite past 6 weeks. Increase in cardiac murmur from a II to IV/VI. Additionally, patient did display some discomfort on abdominal palpation.
Current Medications: N/A

Lab Results: 8/9/2021- ALP 169. GGT 47. TBIL 1.9. CBC mild dehydration.
Date of Previous IntraPet Ultrasound: No previous.
Sedation :Not needed.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some minor age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The right kidney measured 3.55 cm. The left kidney measured 3.51 cm.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The right adrenal gland measured 1.46 cm x 0.37 cm at the caudal pole and 0.38 cm at the cranial pole. The left adrenal gland measured 1.3 cm x 0.36 cm at the caudal pole and 0.44 cm at the cranial pole.

Spleen

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

Liver

Exam of the cranial abdomen demonstrated excessive **liver** size, swollen contour, with conserved uniform architecture. Parenchymal echogenicity was diffusely isoechoic to the spleen and falciform fat. Minor excessive GB debris was noted (not overtly pathological) with the presence gall bladder dilation and precipitate without the overt formation of mucocele but this may be an issue in the future. This type of liver presentation typically is associated with slow and gradual SAP elevations with low-grade ALT rise. USG-FNA sampling is encouraged if more aggressive LE profiles are present such as ALT > 200 or rapid rise in SAP. These presentations are usually reactive hepatopathies owing to other disease processes either endocrine

(Diabetes, Hypothyroidism, Cushing's disease), "antigen surveillance" from the gut/pancreas, or idiopathic breed predisposed progressions. Inflammation was noted. Minor biliary calculi were noted, non-obstructive at the time of the sonogram.

Gastrointestinal

The **pylorus** was thickened in this patient with retention of ingesta. No loss of mural detail noted, however, hypertrophied muscularis and remodeled mucosa noted. Some aspects of pyloric gastropathy are present, yet full criteria not evident. The small intestine and colon were unremarkable.

Pancreas

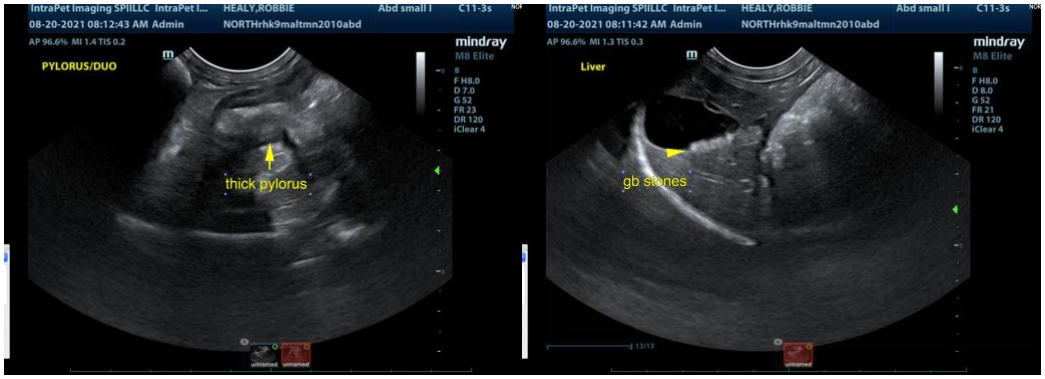
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

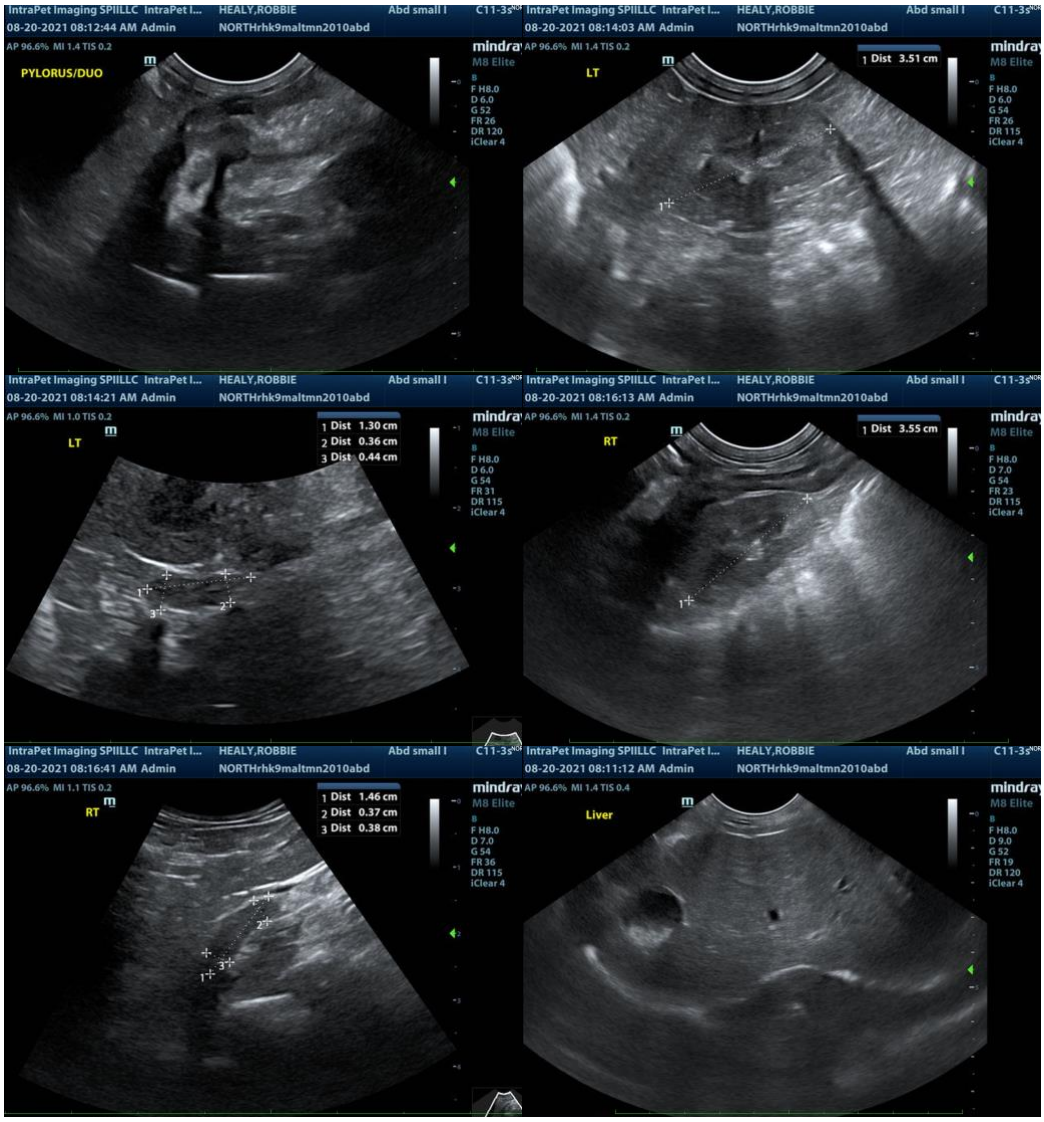
ULTRASONOGRAPHIC FINDINGS

- Minor gallbladder calculi, however, given the bilirubin elevation this may be a momentary elevation theoretically owing to passage of biliary calculi which are passive at the moment and non-obstuctive
- Thickened pylous with early form of hypertrophic pyloric gastropathy with delayed outflow pattern
- Age-related renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If bilirubin elevation is persistently present, then ultrasound guided FNA of the liver warranted. Leptospirosis titers warranted, yet unlikely. History that fits a delayed outflow pattern would be recommended. This patient may have difficulty with delayed outflow especially if kibble is utilized as a food source as opposed to canned diet. Poor appetitie likely owing to gastritis. Assessment for pain related anorexia also warranted. Ursodiol therapy over the next 6-8 weeks, effectiveness is highly variable patient to patient dissolving calculi in my experience.





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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