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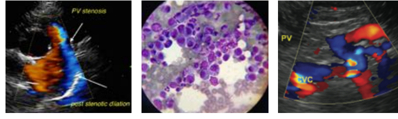

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE
10/5/22

PATIENT
Theo Armstrong

SPECIES
Feline

BREED
Domestic Shorthair

SEX
Neutered male

AGE
10/3/08

WEIGHT
11.7 lbs

INTERPRETED BY
Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME
Frederick Road VH

REFERRING VET
Dr. Flynn

INVOICE
39942

PRESENTING CLINICAL SIGNS

Theo was diagnosed with Hyperthyroidism in September of 2021. Follow-ups after starting methimazole resulting in normalization of his lab results after increasing him to 2.5 mg in the morning and 5 mg in the evening. His T4 was normal in April of this year on that dosing regimen, and the owner has switching to giving the 5 mg in the morning and 2.5 in the evening. Theo has recently lost weight, down from 13.9 lb in April to 11.7 lbs on the day of his visit. This is around the same weight as at the time of his initial HT4 diagnosis in September of last year. He has been throwing up intermittently; he will vomit for 2-3 days in a row every few weeks, but always has a good appetite and the vomiting resolves spontaneously. Exam was unremarkable other than the weight loss. He does have significant dental disease but does not seem painful when his mouth is handled. He had one abrasion near his face but his owner attributed that to conflict with the other cat in the household. He has a stiff gait and some significant arthritis. Theo was previously diagnosed with diabetes mellitus but has been in remission and off insulin since February of 2020 with no reported pu/pd at home.
His lab work showed a leukopenia and an anemia, which the specialist at IDEXX believed was unlikely to be due to the methimazole. She was concerned for potential GI disease and recommended a GI panel and an abdominal ultrasound for additional workup.
Current Medications: Methimazole 5 mg in the AM and 2.5 mg in the PM
Lab Results: leukopenia, anemia, elevated T4 (uncertain if artifact as o feels he may have vomited his last few doses prior to the test - will repeat).
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

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 was 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 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 left kidney measured 4.53 cm. The right kidney measured 4.78 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.

Spleen

The **spleen** was mildly enlarged with uniform, but subtly micronodular parenchyma. Subcapsular echogenicity is noted, possible thrombosis or hematoma. The spleen measured 1.2 cm in width. Slight free fluid was noted around the spleen.

Liver

The **liver** in this patient revealed multi-focal, polycystic changes. The gallbladder was unremarkable with tortuous cystic duct. A cystic lesion was noted in the mid cranial liver and measured 3.23 x 2.0 cm.

Gastrointestinal

The **gastrointestinal** presentation revealed mild uniform prominence of the gastric mucosa as well as areas of "ropey" small intestinal wall. The muscularis layer was hypertrophied inverting the normal ratio (1:3). The intestinal submucosa was slightly irregular, thickened and hyperechoic suggestive of low grade, chronic inflammation. No evidence of obstruction was present. Chronic inflammatory bowel disease is probable with a low possibility of an early neoplastic event such as lymphoma or, less likely, dry form FIP can at times be found on biopsy of these presentations. Full thickness tissue biopsies via open laparotomy, ideally guided by intraoperative ultrasound in order to obtain the most representative mural sample, would be necessary to rule more significant disease than IBD.

Pancreas

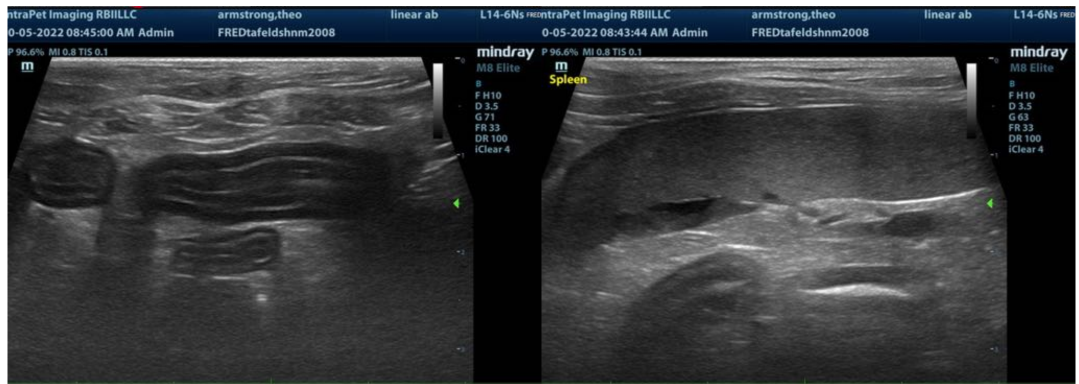
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

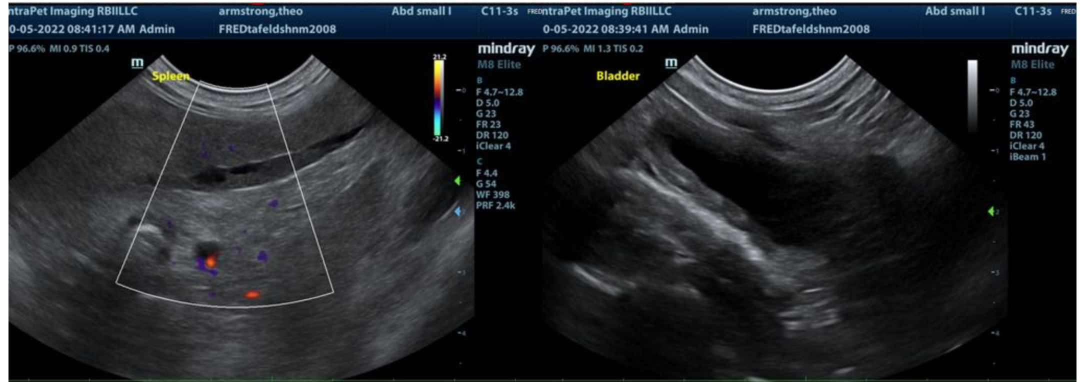
ULTRASONOGRAPHIC FINDINGS

Variable intestinal thickening.
Subjectively benign cystic hepatic lesion.
Enlarged irregular spleen with subcapsular echogenicity and free fluid around the spleen.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Direct splenectomy and intestinal biopsies are recommended. Screening FNA of the spleen can be considered for further definition. This is strongly suggestive for active inflammation along with possible underlying round cell neoplasia.





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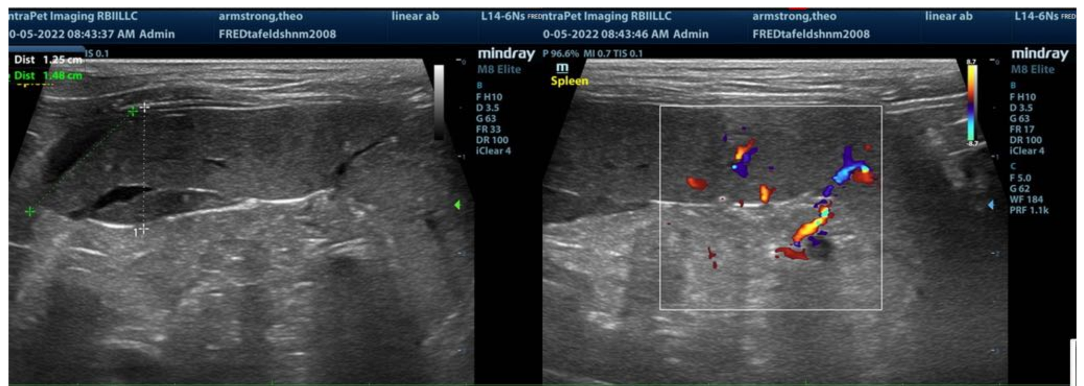

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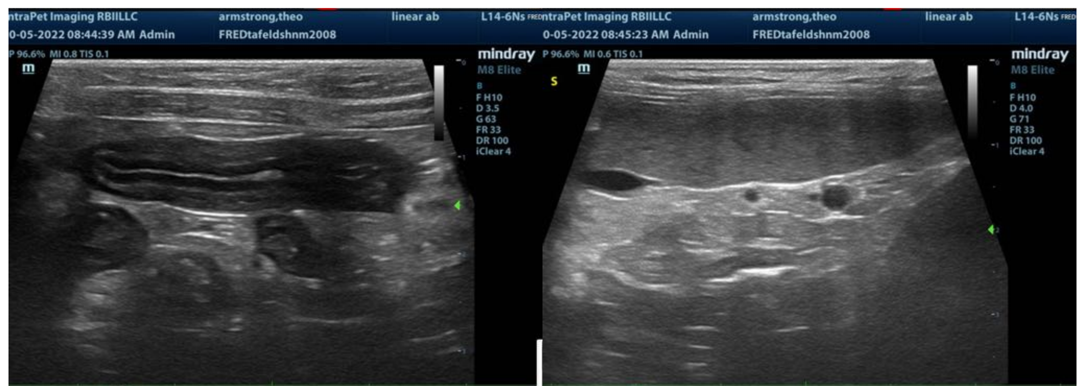
Spleen



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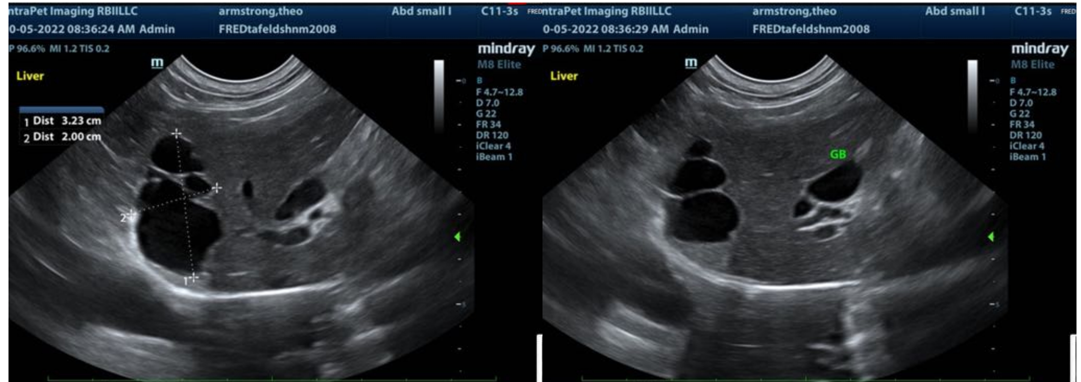

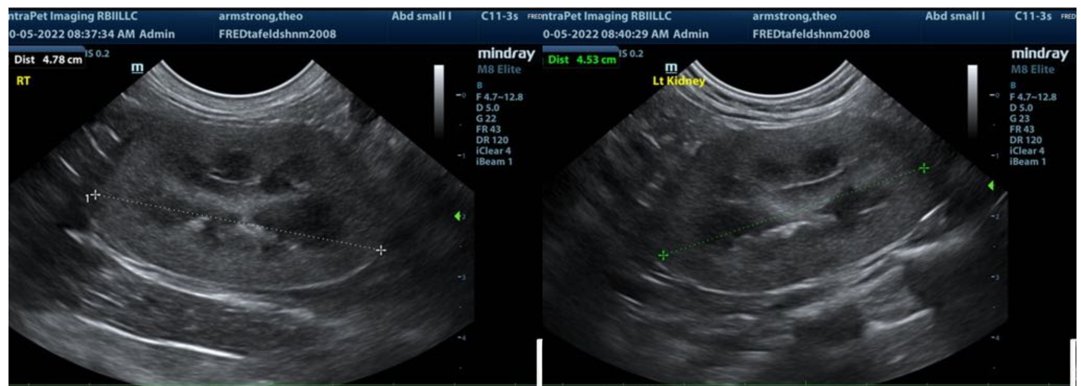

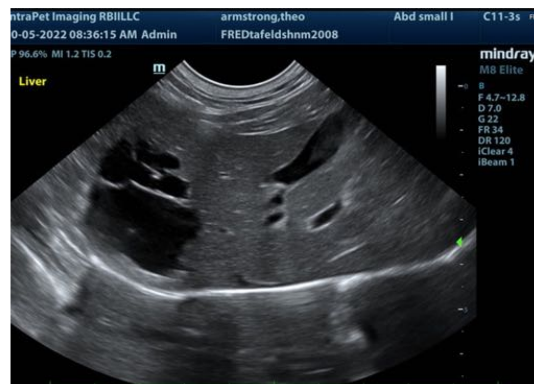

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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