



PATIENT

Jack Danto

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

11 Years

WEIGHT

5.5 Pounds

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Summit Dog & Cat
Hospital

REFERRING VET

Dr. Vogler

INVOICE

29846

DATE

11/17/21

PRESENTING CLINICAL SIGNS

Increased azotemia despite urine culture negative, severe hyperglobulinemia, isosthenuria, anemia, likely renal disease, hypercalcemia (but normal on most recent lab). Possible neoplasia? FIP? Current meds: mirtaz, SQ fluid therapy weekly, renal diet

Abnormal PE/Chem/CBC/UA Results: Alb 2.3, BUN/UREA 60, Chol 50, TP 11.6, Glob 9.3, A/G Ratio 0.2, Na/K Ratio 31, Eos 0%, Platelets 113x10³, Hemoglobin 8.2, Hematocrit 25%

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 pelvic urethra was imaged 2.0 cm beyond the cystourethral junction.

The **kidneys** presented a relatively uniform cortical hyperechogenicity when compared to the renal medulla, spleen and liver. No overt masses were noted. Corticomedullary definition was nebulous and the ratio favored the cortex slightly. The ureters were not visible and assumed to be normal. These changes are most consistent with chronic interstitial nephritis yet infiltrative disease could not be entirely ruled out without biopsy though neoplasia is not suspected. The left kidney measured 4.04 cm. The right kidney measured 4.0 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 left adrenal gland measured 0.54 cm in width. The right adrenal gland measured 0.49 cm.

Spleen

The **spleen** was mildly enlarged with slight scalloping contour, measuring 1.4 cm in width.

Liver

Passive congestion **liver** pattern noted with dilated vena cava at 7.0 mm in width at the level of the diaphragm. The gallbladder was unremarkable.

Pleural effusion was noted through the diaphragm.

Gastrointestinal

The **gastrointestinal** presentation revealed mild uniform prominence of the gastric mucosa as well as areas of "ropey" small intestinal wall with slight disruption of the normal 1:3 muscularis/mucosal ratio. The intestinal submucosa was slightly irregular, thickened and hyperechoic suggestive of low grade, chronic disease. No concerning lymphadenopathy was visible. No evidence of obstruction was present. Chronic inflammatory bowel disease is likely with a low possibility of an early neoplastic event such as lymphoma. 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 out this possibility.

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.



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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 subxyphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

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ULTRASONOGRAPHIC FINDINGS

- Enlarged spleen with passive congestion liver pattern

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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Echocardiogram recommended to assess for causes of left and/or right-sided failure that would cause the pleural effusion or passive congestion in the liver respectively. FNA of the spleen indicated to rule out underlying round cell neoplasia such as multiple myeloma or lymphoma. Guarded prognosis. If left atrial size is not excessive, then pleural effusion may be owing to neoplastic spread. CBC path review and splenic FNA warranted +/- pleurocentesis and cytospin of the thoracic fluid to assess for exfoliating neoplasia/lymphomatosis or similar.

SEX

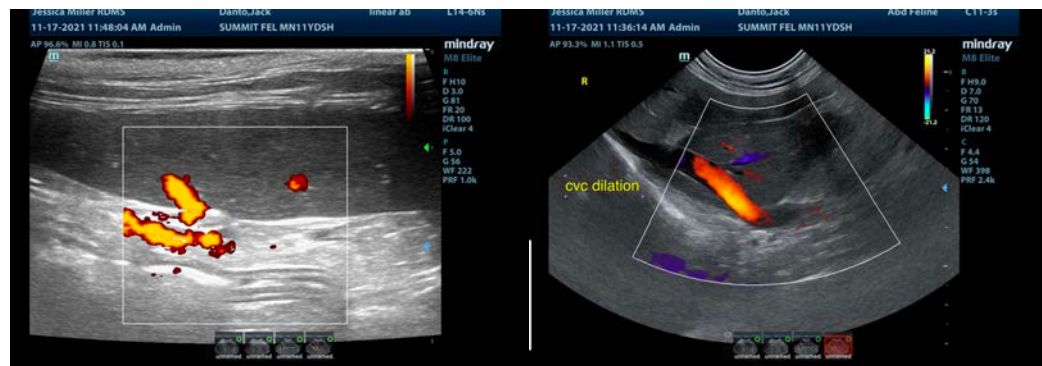
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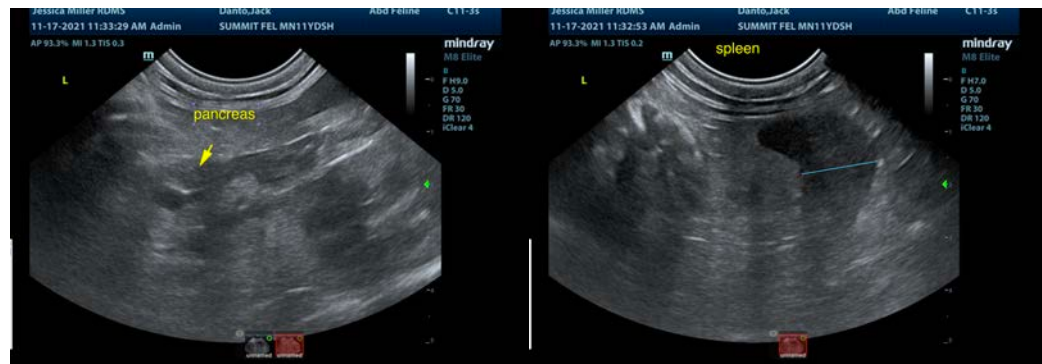
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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info@SonoPath.com