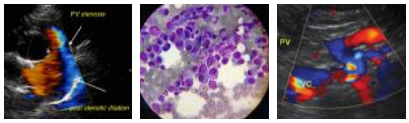
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE
2/4/22

PATIENT
Christopher Ruhl

SPECIES
Feline

BREED
DSH

SEX
Neutered Male

AGE
12/19/04

WEIGHT
8.06 Lbs.

INTERPRETED BY
Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME
Hickory VH

REFERRING VET
Dr. McNesby

INVOICE
13789

PRESENTING CLINICAL SIGNS

History: Heart murmur of several years' duration (II/VI). Recent history of weight loss with normal lab work (borderline T4).

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Stephanie Pearce RDCS, RVT.

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 **right kidney** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some moderate 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 3.64 cm.

The **left kidney** revealed a cortical infarct. An adjacent calculus was noted at the caudal pole of the left kidney. The left kidney measured 3.0 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 right adrenal gland measured 0.41 cm. The left adrenal gland measured 0.5 cm.

Spleen

The **spleen** was mildly enlarged with uniform, but subtly micronodular parenchyma, and undulating capsular contour. This is consistent with reactive spleen owing to immune stimulus or early infiltrative disease such as mast cell disease or lymphoma. 25-gauge FNA would be ideal if weight loss is an issue to differentiate early round cell neoplasia versus splenitis or reactive spleen all of which can present in this manner. The spleen measured up to 1.0 cm in width. This is a moderate change.

Liver

The **liver** was uniformly enlarged. Some mild age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable. The right cranial liver revealed a hypoechoic nodule, measuring 1.8 cm.

Gastrointestinal

The **gastrointestinal** presentation revealed mild uniform prominence of the gastric mucosa as well as areas of "ropey" small intestinal wall. Muscularis/mucosal ratio was 1:1. The intestinal submucosa was slightly irregular, thickened and hyperechoic suggestive of low grade, chronic disease. Intestinal wall thickness measured up to 0.4 cm. No concerning lymphadenopathy was visible. 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. Ileocecal thickening was noted as well with what appeared to be entrapped stool.

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some moderate 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 subxyphoid palpation, then low-grade smoldering chronic pancreatitis should be suspected. Duct dilation was noted. The right pancreatic limb measured 1.08 cm.

ULTRASONOGRAPHIC FINDINGS

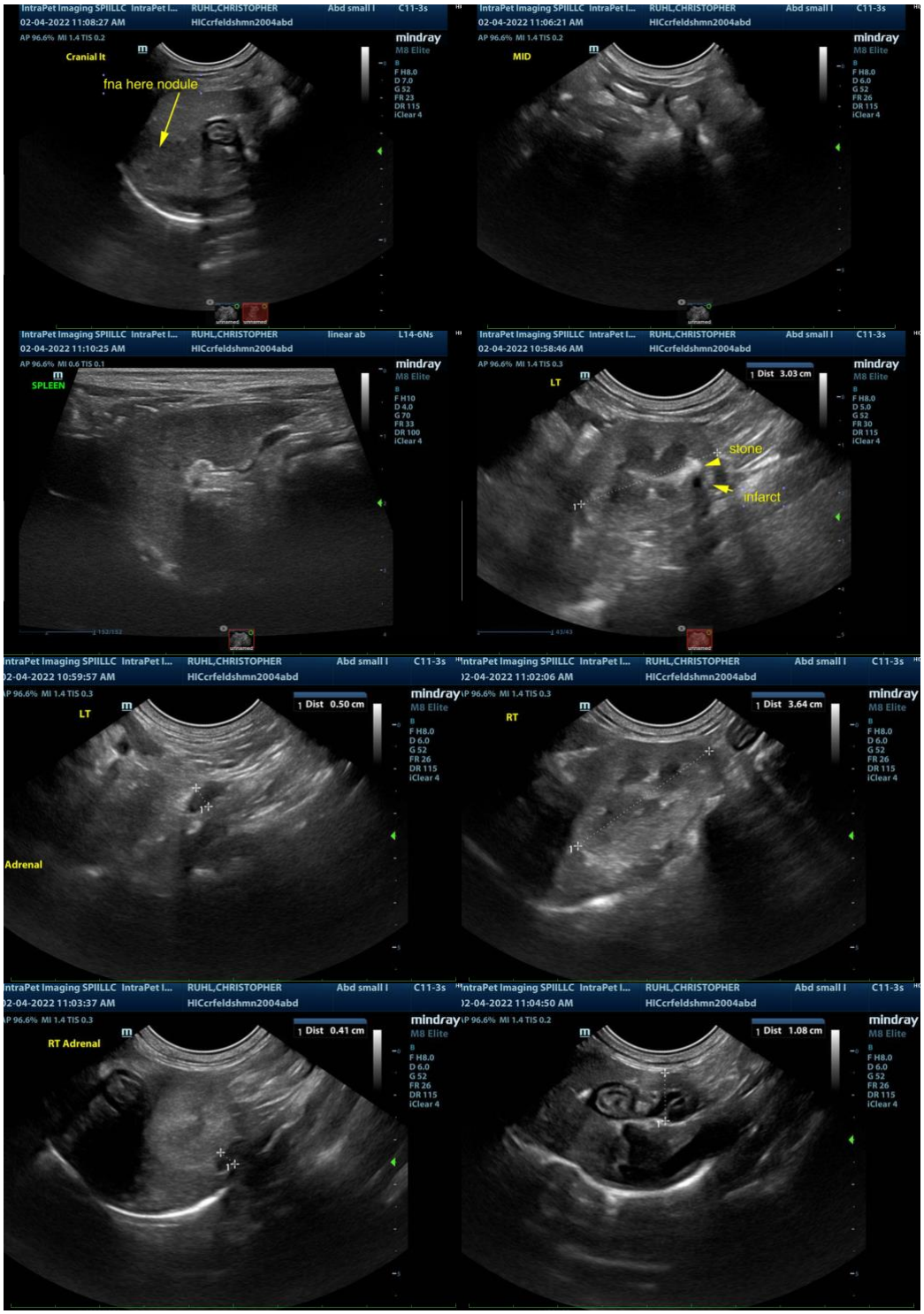
- Chronic renal changes with mineralization
- Undefined splenomegaly
- Mild hepatomegaly with nodule, concern for emerging round cell neoplasia
- Diffuse intestinal thickening
- Prominent chronic pancreatic changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No obvious neoplastic criteria met in this patient. However, emerging round cell neoplasia cannot be completely ruled out given the GI, hepatic and splenic presentation. Screening FNA of the spleen and liver would be warranted. Full thickness GI biopsies with hepatosplenic biopsies would be likely more definitive. If sampling is not an option, clinical trial of the following may prove effective. Sampling is strongly recommended in this patient.

Triaditis/Pancreatitis protocol

Part or all of this protocol may be considered based on your clinical impression of the patient: Recommend pain management when anorexic with **Buprenorphine** (0.01-0.02 mg/kg IM or SC), clinical trial of **Zithromax** (50 mg sid/cat x 10 days, 3 weeks if bartonella +), **Prednisolone** (0.5-2 mg/kg tapering over 1 week to minimal effective dose), and **B12 injections** if weight loss (Cyanobalamine 250 mcg sub-q once-weekly x six weeks, then every other week for six weeks and then once-monthly, long-term if necessary), **novel-protein or hydrolyzed diet (***Hydrolyzed diets have been shown to be more effective in dietary intolerance case management compared to hypoallergenic diets***)** or the **magical Purina DM** (changing protein source is crucial and may need rotation every 6 months if clinical signs recur) Diet trials is a whatever works phenomenon. If vomiting becomes a persistent issue then endoscopy would be warranted and/or recheck sonogram to assess more emerging disease. One diet does not work for all patients so different trials may be necessary or protein source rotation every 6 months as new sensitivities develop.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MID
02-04-2022 11:10:25 AM
SPLEEN
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LT
Dist 3.03 cm
stone
infarct
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LT
Dist 0.50 cm
Adrenal
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RT
Dist 3.64 cm
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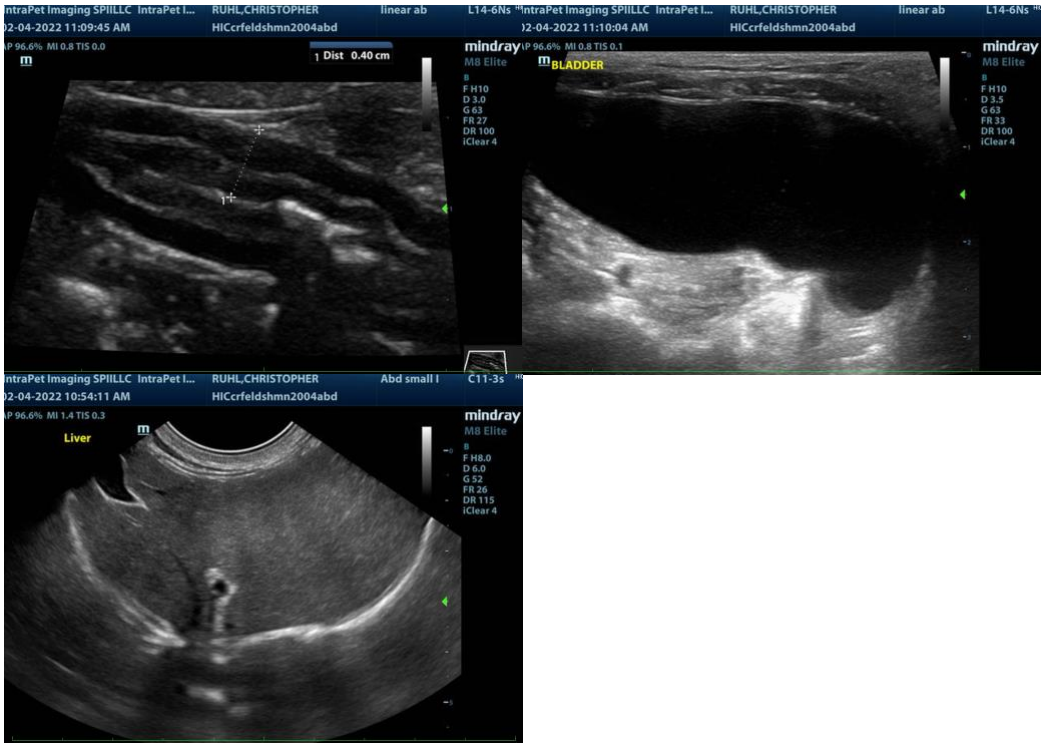

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
Eric.Lindquist@SonoPath.com