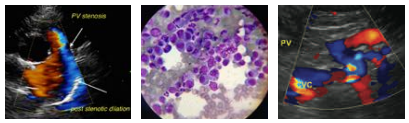
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE
1/12/22

PATIENT
NIco Black

SPECIES
Feline

BREED
Domestic Shorthair

SEX
Neutered male

AGE
5/06

WEIGHT
12.83 lbs

INTERPRETED BY
Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME
Cat Hospital at Towson

REFERRING VET
Dr. Brunt

INVOICE
95204

PRESENTING CLINICAL SIGNS

History: HT4 diagnosed 12-12-2021, Pancreatitis.
Lab Results: HT4 confirmed; TLI/PLI/Cobalamin/Folate WNL.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
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** 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 revealed slight pyelectasia that measured 0.28 cm. An anechoic cyst was noted in the cranial pole measuring 0.74 cm. The left kidney measured 4.39 cm. Pelvic calculus was noted in the right kidney and measured 0.78 cm. The right kidney was mildly enlarged and measured 5.1 cm. This may be owing to prior episodes of obstructive disease.

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 0.48 cm.

Spleen

The **spleen** revealed a 2.6 x 2.0 cm hypoechoic uniform mass.

Liver

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. Double layered echogenic gallbladder was noted with increased portal markings. The common bile duct was mildly dilated and measured 0.46 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). Intestinal wall thickness measured up to 0.26 cm. 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. The mesenteric lymph nodes were reactive and measured 0.92 x 0.71 cm. Some reactive mesentery was noted around the mesenteric root.

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

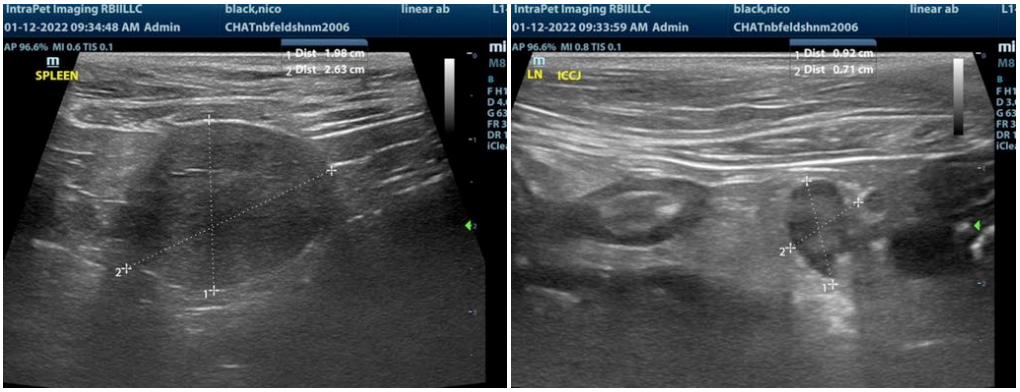
Chronic cholangitis liver pattern with dilated common bile duct.
Splenic mass, may be benign.
Renal calculi, interstitial nephrosis pattern.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

FNA of the splenic mass is recommended +/- the liver. The spleen may be a malformation and not neoplastic. FNA of the mesenteric lymph nodes would be warranted if accessible. History of chronic triaditis and cholangitis is likely. A clinical trial of the following may prove effective.

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.




IntraPet Imaging RBIILLC
black,nico
linear ab
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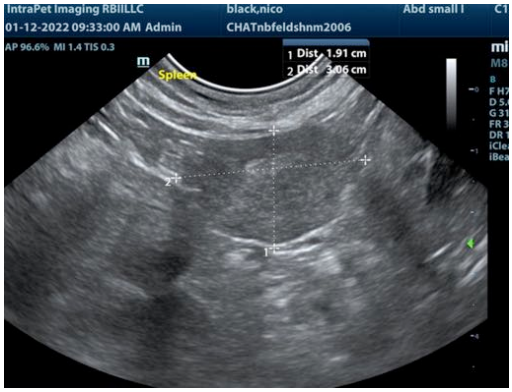
CHATnbfeldshnm2006
AP 96.6% MI 0.9 TIS 0.1
1 Dist 0.26 cm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black,nico
Abd small I
01-12-2022 09:33:00 AM Admin
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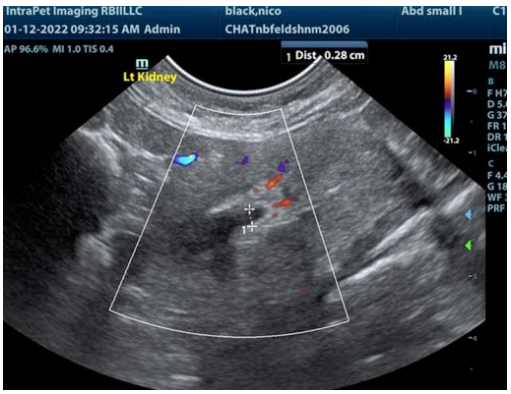
AP 96.6% MI 1.4 TIS 0.3
Spleen
1 Dist 1.91 cm
2 Dist 3.06 cm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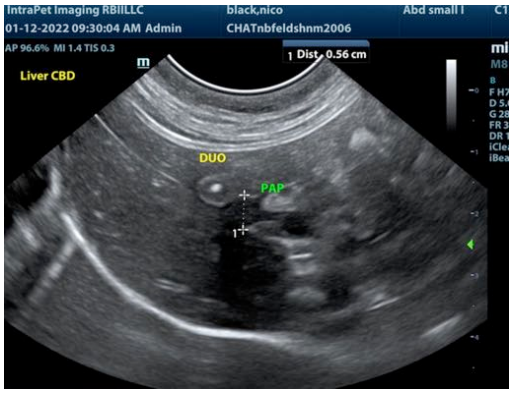
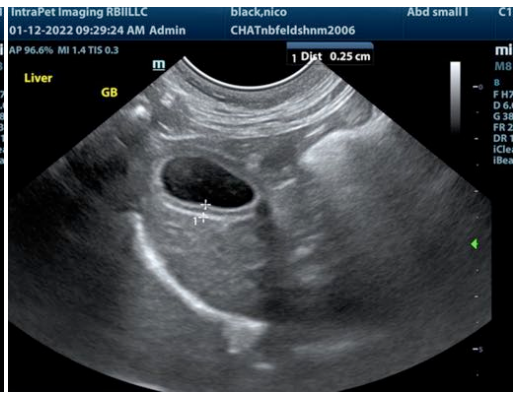
CHATnbfeldshnm2006
AP 96.6% MI 1.0 TIS 0.4
Lt Kidney
1 Dist 0.28 cm


IntraPet Imaging RBIILLC
black,nico
Abd small I
01-12-2022 09:32:08 AM Admin
CHATnbfeldshnm2006
AP 96.6% MI 1.4 TIS 0.3
Lt Kidney
1 Dist 0.74 cm


IntraPet Imaging RBIILLC
black,nico
Abd small I
01-12-2022 09:30:35 AM Admin
CHATnbfeldshnm2006
AP 96.6% MI 1.2 TIS 0.2
Rt Kidney
1 Dist 5.08 cm
2 Dist 0.78 cm


IntraPet Imaging RBIILLC
black,nico
Abd small I
01-12-2022 09:30:04 AM Admin
CHATnbfeldshnm2006
AP 96.6% MI 1.4 TIS 0.3
Liver CBD
1 Dist 0.56 cm
DUO
PAP


IntraPet Imaging RBIILLC
black,nico
Abd small I
01-12-2022 09:29:57 AM Admin
CHATnbfeldshnm2006
AP 96.6% MI 1.4 TIS 0.3
Liver CBD
1 Dist 0.46 cm


IntraPet Imaging RBIILLC
black,nico
Abd small I
01-12-2022 09:29:24 AM Admin
CHATnbfeldshnm2006
AP 96.6% MI 1.4 TIS 0.3
Liver
GB
1 Dist 0.25 cm

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