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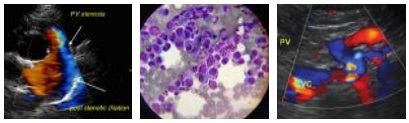

SonoPath
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DATE
3/25/22

PATIENT
Nicky Devito

SPECIES
Feline

BREED
Domestic Shorthair

SEX
Neutered male

AGE
8/6/11

WEIGHT
8 lbs

INTERPRETED BY
Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME
Pleasantville AH

REFERRING VET
Dr. Gounaris

INVOICE
14522

PRESENTING CLINICAL SIGNS

New patient at our hospital. Presented for annual exam and senior blood work. Eating and drinking normally, no vomiting, loose stool. Chronic herpes life long - also presented for bilateral oculonasal discharge which comes and goes. Previous history: Seen at Falls Road Animal Hospital on 6/29/20 for weight loss and lethargy. Blood work was sent out and revealed low normal HCT (35.2%), elevated ALT (163), ALP (358), and tbili (0.8). 3-view thoracic/abdominal radiographs were performed and reviewed by a radiologist. The final report revealed splenomegaly. They recommended checking coagulation factors and performing splenic aspirates. Nicky returned on 7/2/20 for an abdominal ultrasound which revealed splenomegaly (1.59cm in thickness) and hyperechoic liver. Pathology report of the splenic aspirates revealed lymphoid hyperplasia or normal splenic aspirate. Nicky was rechecked on 7/16/20 due to persistent lethargy, which revealed progressively elevated ALT (428), ALP (933), GGT (27), hyperbilirubinemia (6.9). AUS was repeated and was static. Liver aspirates were performed and revealed marked to moderate lipid vacuolar change concerning for hepatic lipidosis as well as cholestasis. He was hospitalized and treated for possible cholangiohepatitis with IV fluids, Unasyn, buprenorphine, Denamarin, and ursodiol. He reportedly ate well in the hospital and liver enzymes improved on 7/17/20: ALT (301), ALP (859), but the hyperbilirubinemia was progressive (7.5). Blood work on 7/18/20 revealed continued elevated liver enzymes: ALT (201), ALP (846), GGT (27) and Tbili (7.2). Blood work 24 hours later showed an improvement in liver enzymes ALT 195, ALP 712, Tbili 7. Another 24 hours later blood work revealed continued improvement in ALT 163, ALP 473, tbili 5.6,. Potassium (3.4) and albumin (2.0) remained slightly low. He was started on acetylcysteine, enrofloxacin, and Derm 3 caps. Blood work on 7/22/20 revealed improvement in Alb 2.2, ALT 187, ALP 500, Tbii 4.7. Potassium remained low (3.1) Nicky was discharged with oral Clavamox, Denamarin, Clavamox, ursodiol, Derm caps (2), Baytril. Nicky was rechecked on 7/3020 and blood work revealed ALT 158, ALP 564, Tbili 4.2. A grade I/VI heart murmur was ausculted and he was clinically jaundice. Nicky had continued to lose weight since discharge. The inappetence and vomiting returned, unable to keep any medications down. Nicky's blood work was rechecked on 8/3/20 and revealed HCT 22.5%, elevated ALP (694), normal ALT (120), Elevated GGT (26), hyperbilirubinemia (4.4), hypokalemia (3.3), calcium 9.1, phosphorus 4.1. He was referred to a specialist at DCRV for further care. At the specialist they hospitalized Nicky. They started IV fluids, maropitant, metronidazole, baytril, and monitored HCT/TS, electrolytes, and bilirubin q 24 hours. He had a repeat abdominal ultrasound with liver and splenic aspirates. No overt neoplasia was noted and liver aspirates were consistent with hepatic lipidosis. They discontinued the enrofloxacin and metronidazole and started him on meropenem injectable abx. He was hospitalized for several weeks and they continued to see improvement in liver enzymes and Tbili. Discharged from the hospital and recovered. Has been tapered off all medications and has not had any recurrence of symptoms since.
Current Medications: Tobramycin eye drops BID, Viralys powder BID, Proviable SID.
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 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 mild 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. The right kidney measured 4.0 cm. Trace pyelectasia was noted at 0.18 cm. The left kidney measured 4.02 cm.

Adrenal Glands

The **left adrenal gland** was 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 0.37 cm.

The region of the **right adrenal gland** revealed no evident pathology.

Spleen

The **spleen** was enlarged, measuring 1.58 cm, uniform.

Liver

The **liver** revealed coarse architecture and increased portal markings. The common bile duct was normal at 0.2 cm. A hepatic lymph node was enlarged, rounded and hypoechoic, measuring 1.75 cm x 1.4 cm.

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. 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.

Free Abdomen

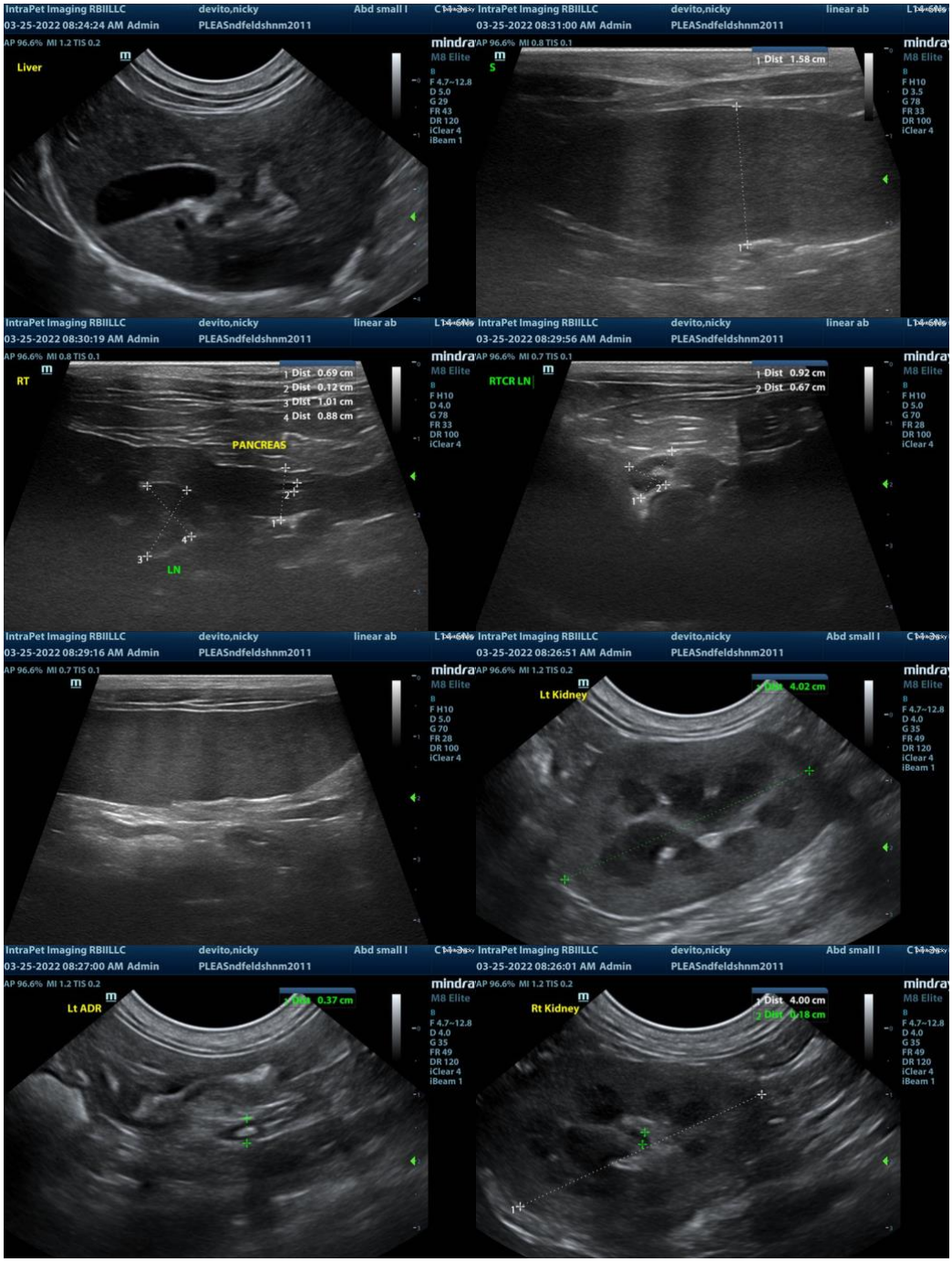
An epigastric **lymph node** was enlarged, rounded and hypoechoic, measuring 0.92 cm x 0.67 cm. A mesenteric lymph node was enlarged, measuring 1.0 cm.

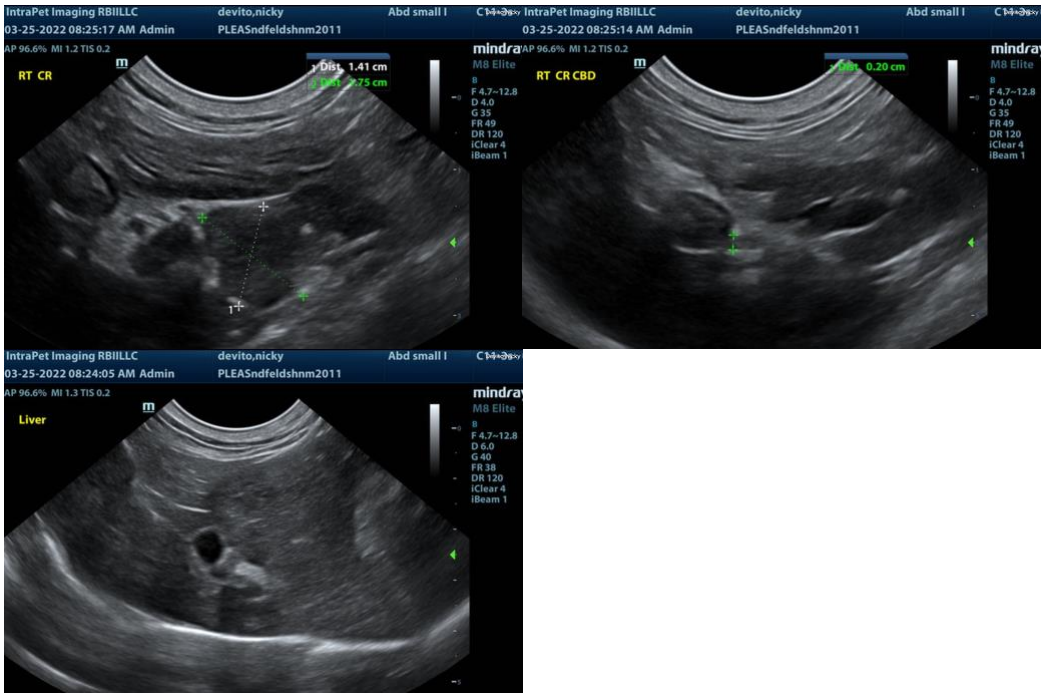
ULTRASONOGRAPHIC FINDINGS

- Splenic enlargement
- Nonspecific hepatic remodeling with hepatic lymphadenopathy
- Age-related pancreatic changes
- IBD GI pattern
- Age-related renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the clinical profile, FNA of the spleen and liver is strongly recommended. Strong concern for round cell neoplasia or reactive spleen, splenitis and cholangiohepatitis. Prognosis is guarded depending upon FNA results. No evidence of post-hepatic obstruction.





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
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