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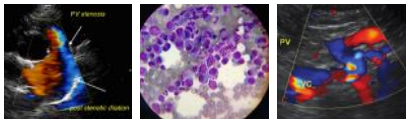

SonoPath
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DATE

5/19/22

PATIENT

Keisa Durkin

SPECIES

Feline

BREED

Munchkin

SEX

Spayed Female

AGE

5/1/06

WEIGHT

6.25 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Belvedere Vet Center

REFERRING VET

Dr. Moulder

INVOICE

37785

PRESENTING CLINICAL SIGNS

Vomited 4x week of 4/28. Blood work indicated mild hepatic elevations. IV fluids for 3 days in hospital (SQ fluids not possible at home). Started on Amoxicillin and Prednisolone. No further vomiting noted but follow up blood work on 5/9 showed continued/worsened hepatic elevations. Historic pancreatitis/IBD managed with diet.

Current Medications: Amoxicillin 11mg/kg BID, Prednisolone 1mg/kg SID.
Lab Results: 4/28- ALT 242, ALKP 224, Tbili 0.7 in house. 5/9- ALT 530, ALKP 338, Tbili 0.9 Antech.
Date of Previous IntraPet Ultrasound: No previous.
Sedation:dex domitor.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (3.78 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.73 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.42 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect.

Spleen

The spleen is severely enlarged in size (1.3 cm in width at the level of the hilus) The spleen echotexture is heterogenous and severely mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. The parenchyma is diffusely nodular with hypoechoic discrete nodules.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is mildly heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There are very subtle ill-defined, hypoechoic nodules visualized in the hepatic parenchyma as well as a larger hypoechoic region measuring 1.76 cm.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The bile duct is severely dilated, measuring 0.57 cm. Proximally, it can be followed to the level of the pancreas in the cranial abdomen. No focal obstruction is visualized.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.13-0.38cm in wall thickness) and the jejunum measured as normal (between 0.15-0.36cm.) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is prominent and hypoechoic as compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid. Prominent pancreatic duct noted at 0.30 cm.

Free Abdomen

There are clusters of prominent mesenteric lymph nodes near the ileocecal junction, measuring 0.57, 0.43 cm with hyperechoic mesentery surrounding. No free fluid.

ULTRASONOGRAPHIC FINDINGS

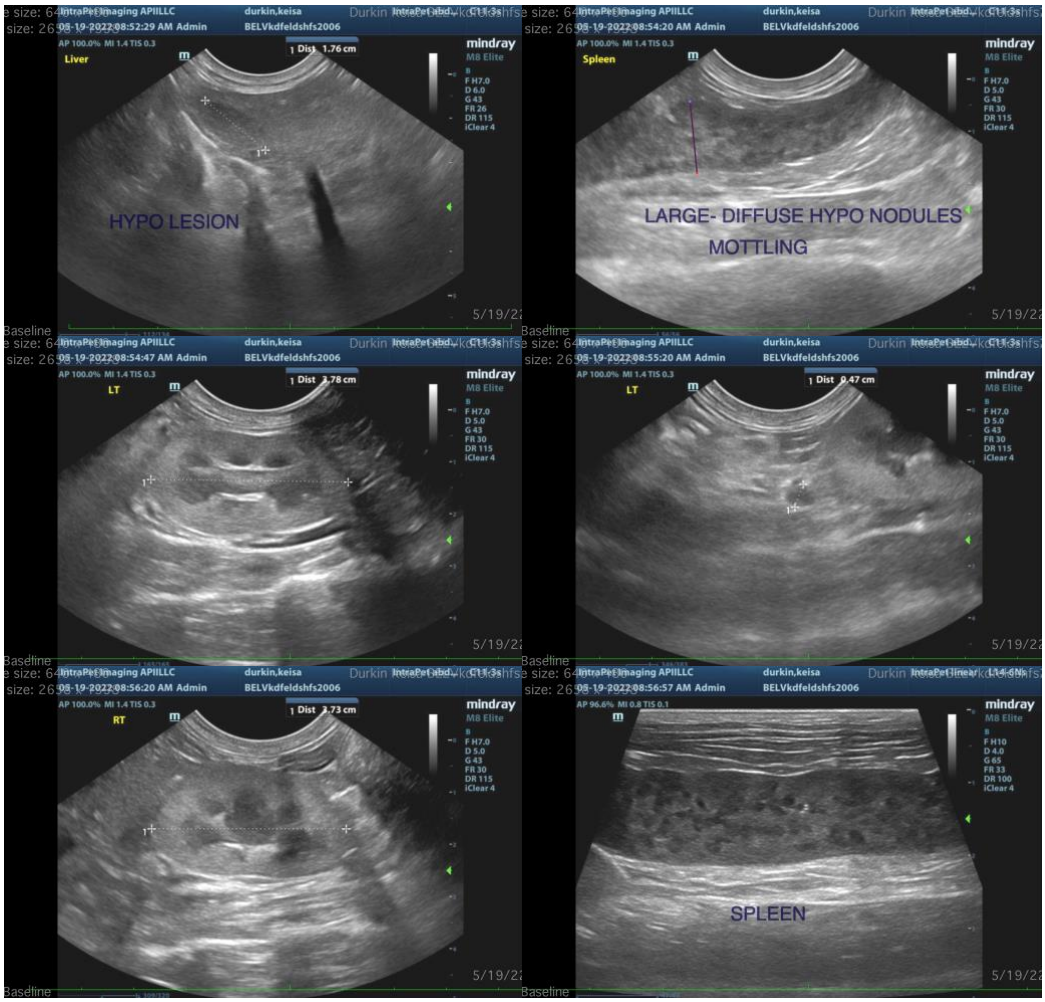
- Large, irregular, diffusely nodular spleen – primary concern would be round cell neoplasia (lymphoma, mast cell disease, etc.). Recommend a fine needle aspirate.
- Hypoechoic, prominent pancreas with prominent pancreatic duct – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Mildly heterogeneous liver with ill-defined, hypoechoic lesions – Hepatic changes are non-specific and could be consistent with inflammation/infection (cholangiohepatitis), infiltrative neoplasia, lipidosis or other hepatopathy.
- Moderate gallbladder debris with significantly dilated common bile duct – Dilation of the common bile duct could be consistent with a functional obstruction (i.e. primary hepatic disease resulting in hepatocellular swelling) or with an extrahepatic bile duct obstruction (ie. choledocholith, bile duct tumor, pancreatic disease, other).
- Prominent mesenteric lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

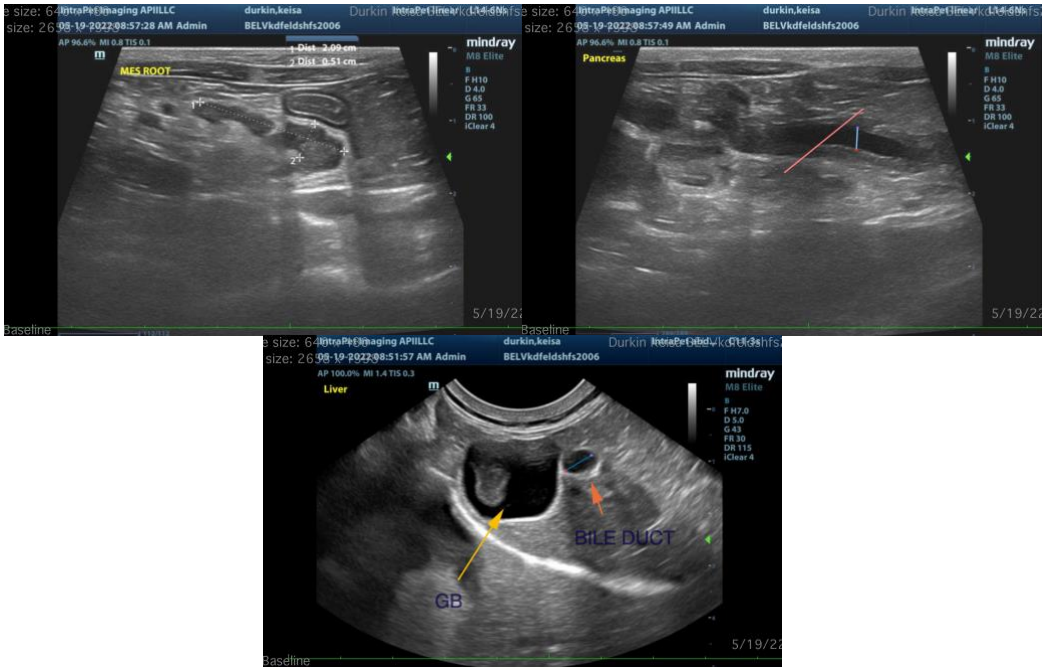
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The most significant lesion observed is involving the spleen, which is greatly enlarged and severely nodular. Recommend a fine needle aspirate to look for evidence of underlying round cell neoplasia, etc. Additionally, recommend 3-view thoracic radiographs and consider fine needle aspirate of a prominent mesenteric lymph node.

Additionally, the pancreas is prominent, and the bile duct is significantly dilated. An obvious obstructive process is not visualized, but there is concern for this being present. Recommend continued monitoring for progressive dilation, and consider starting Ursodiol.

Considering the appropriate medical therapy implemented and the time involved with progression, I would consider a fine needle aspirate of the liver (if coagulation parameters are normal). If cytology of the liver, spleen and lymph nodes is not diagnostic, I would consider referral to a boarded surgeon for evaluation of the gallbladder, bile duct, and to biopsy the liver and spleen. Alternately, a CT scan could be considered preoperatively to obtain better resolution and try to identify additional lesions prior to surgery.





The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. 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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