

**DATE PRESENTING CLINICAL SIGNS**

2/18/22

History: Presenting Complaint: Losing Weight. Date: 02-17-2022 Notes: Started with jaundice and change in appetite Sept/oct last year Has been seen at RDVM, labwork, radiographs, US and lept testing performed. Negative lepto, US shows enlarged Liver/spleen (intrapet November 2021) Did not get sampling, treated with liver support, owner unsure of what specific medications Did not improve She remains overall BAR, no vomiting, but losing wt, will not eat anything other than people food/chicken. Bloodwork in November- elevated ALT,ALP, T.bil ; Lepto PCR- negative. Assessment: Reviewed causes for jaundice/hepatopathy. Rule out cancer, infection, lepto, bacterial, degenerative disease, inflammatory, parasites. I am concerned she has a good attitude despite how sick she is. If we want to proceed-- recommend IVF, liver support and get aspirates of the liver tissue if coags are wnl, discussed that FNA is not always conclusive, but would start with this over biopsy b/c feel she may not do well under anesthesia for full abdominal procedure. This could be cancer -- owner is aware.

PATIENT

Nova Lee

SPECIES

Canine

BREED

Pit Bull Terrier

SEX

Spayed Female

AGE

5/25/17

WEIGHT

53.7 Pounds

INTERPRETED BY

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MS, Diplomate ACVIM
(Small Animal Internal
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IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Animal Emergency
Hospital

REFERRING VET

Dr. King

INVOICE

35762

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, or masses. There is a small pile of hyperechoic debris in the ventral portion of the urinary bladder, forming a strip approximately 0.64 cm long. This is most consistent with sandy, mineralized debris and is stable from the previous ultrasound.

The left kidney has a normal shape and size (6.63 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 (7.38 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 0.61 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 right adrenal gland is normal in size measuring 0.63 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is large and irregular. The spleen echotexture is heterogenous and mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No

focal parenchymal abnormalities are visualized. The severity of these lesions has progressed mildly since the last scan 3 months ago.

Liver

The liver is large in size and irregular. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. The liver is very large with rounded margins and numerous, ill-defined, coalescing, expansile, solid mass effects with very little normal appearing liver. Example of an isoechoic mass effect is 7.31 cm x 7.66 cm.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm 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 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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 large, hypoechoic and mottled with surrounding hyperechoic mesentery. Findings are most consistent with mild pancreatitis or infiltrative disease.

Free Abdomen

There is a large amount of anechoic free fluid. There are prominent mesenteric lymph nodes visualized measuring 0.86 cm and 1.11 cm in diameter. The omentum is of increased echogenicity.

Other

A brief view of the heart was submitted. No significant pericardial effusion was seen.

ULTRASONOGRAPHIC FINDINGS

- Large, irregular, heterogeneous liver with numerous coalescing, expansile masses. The expansile mass effects have progressed from the last scan.
- Large, mottled spleen – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis. The reticulated mottled pattern persists in today's scan.
- Hypoechoic, mottled, prominent pancreas with surrounding hyperechoic mesentery – The pancreatic changes are most consistent with mild pancreatitis/pancreatic inflammation. Recommend

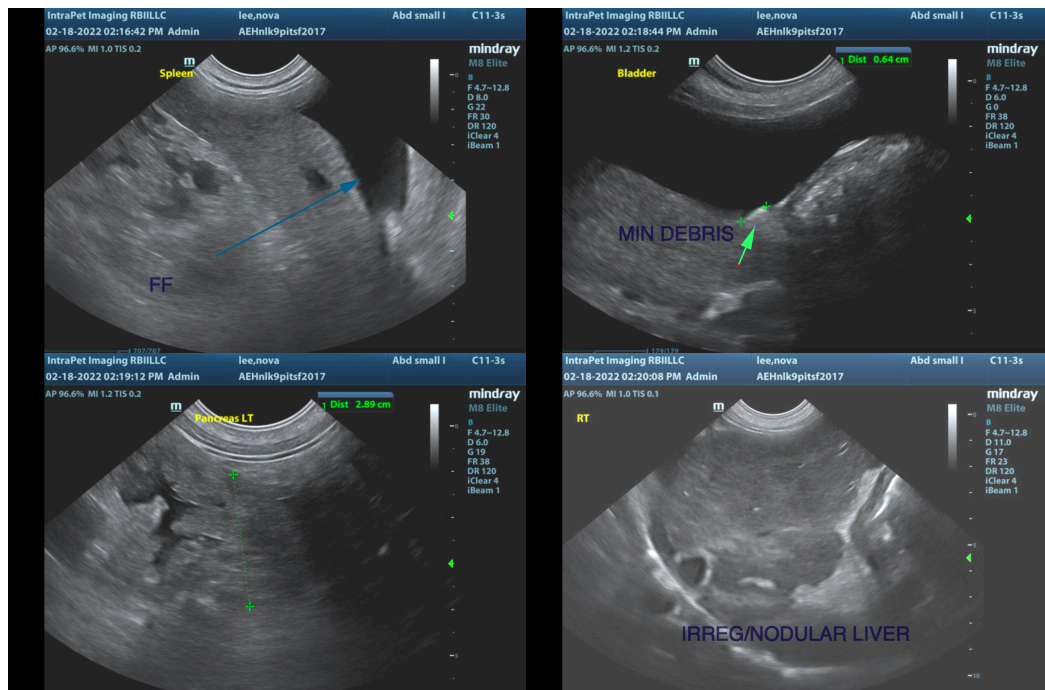
fPLI testing and continued monitoring for improvement or possible development of a pancreatic abscess. Consider fine needle aspirate if not improving.

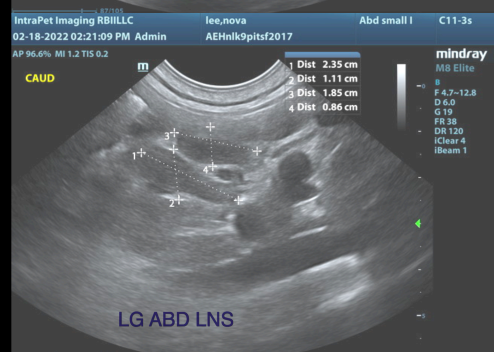
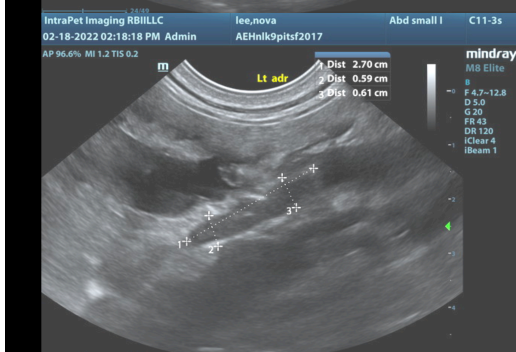
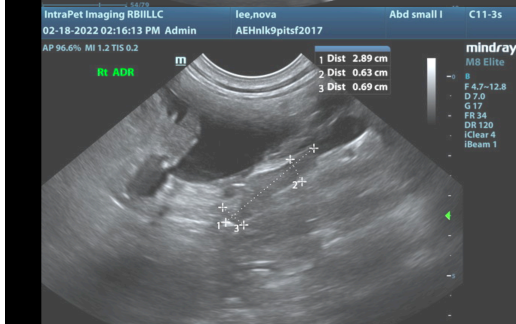
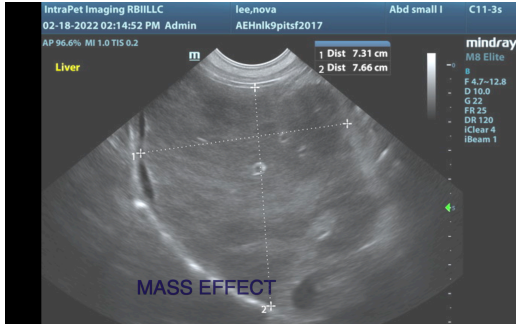
- Small amount of dependent mineralized debris in the urinary bladder
- Large volume free abdominal fluid with moderate mesenteric lymphadenopathy – The moderate mesenteric lymphadenopathy is most concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease (tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation. The volume of free fluid in the abdomen is increased as compared to the previous scan.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The lesions observed on today's scan involving the liver, spleen, lymph nodes and abdominal fluid have all progressed since the last scan. Concern for round cell neoplasia are persistent, and sampling is recommended of the liver, spleen, and abdominal fluid for cytologic evaluation.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.





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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