

**DATE PRESENTING CLINICAL SIGNS**

1/11/22

History: 12/22- bx done of mass on lip came back malignant neoplasm. Recommend specialist and when they went there, they did pre-op radiographs and recommended AUS.

PATIENT

Brody Longo

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

SPECIES

Canine

Brief cardiac evaluation was offered and declined.

BREED

Border Collie X

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.

SEX

Spayed Female

The left kidney has a normal shape and size (6.56 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is evidence of corticomedullary rim sign. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

AGE

3/17/11

The right kidney has a normal shape and size (6.82 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is evidence of corticomedullary rim sign. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

WEIGHT

70 Pounds

INTERPRETED BY

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

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.

IMAGING PERFORMED BY

Stephanie Pearce
RDMS, RVT

The right adrenal gland is normal in size measuring 0.71 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.

HOSPITAL NAME

Swan Creek Vet Clinic

Spleen

The spleen is subjectively normal in size. The spleen echotexture is heterogenous and mildly mottled, the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. There are rare hyperechoic foci visualized within the spleen, measuring approximately 0.5 cm in addition to pinpoint foci visualized diffusely.

REFERRING VET

Dr. Holloway

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is severely heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. The liver is generally severely mottled and heterogeneous, but additionally there are ill-defined hypoechoic nodules within the hepatic parenchyma, varying in size from 0.2-1.0 cm.

INVOICE

34127

The gall bladder lumen is significantly distended. Some areas of the wall appear mildly thickened with adherent debris. There is a large amount of primarily non-organized echogenic debris. There is no evidence of bile duct dilation. These changes can be consistent with an early gall bladder mucocele.

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. Jejunum wall measured 0.26 cm. 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 normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Severely heterogeneous liver with ill-defined, hypoechoic nodules – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy. Findings could be consistent with a benign process, or less likely underlying neoplasia.
- Large gallbladder sludge – Findings are consistent with early gallbladder disease. There is no evidence of a primary mucocele at this time, but recommend close monitoring and starting Ursodiol.
- Mildly mottled spleen with hyperechoic foci – 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. I suspect these represent benign changes, but if the primary neoplasm has high metastatic potential, you may want to consider a fine needle aspirate of the spleen.
- Decreased corticomedullary distinction in both kidneys with corticomedullary rim sign – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Clinical significance uncertain, can be seen in normal patients and in cases of ethylene glycol toxicity, chronic interstitial nephritis, and leptospirosis.

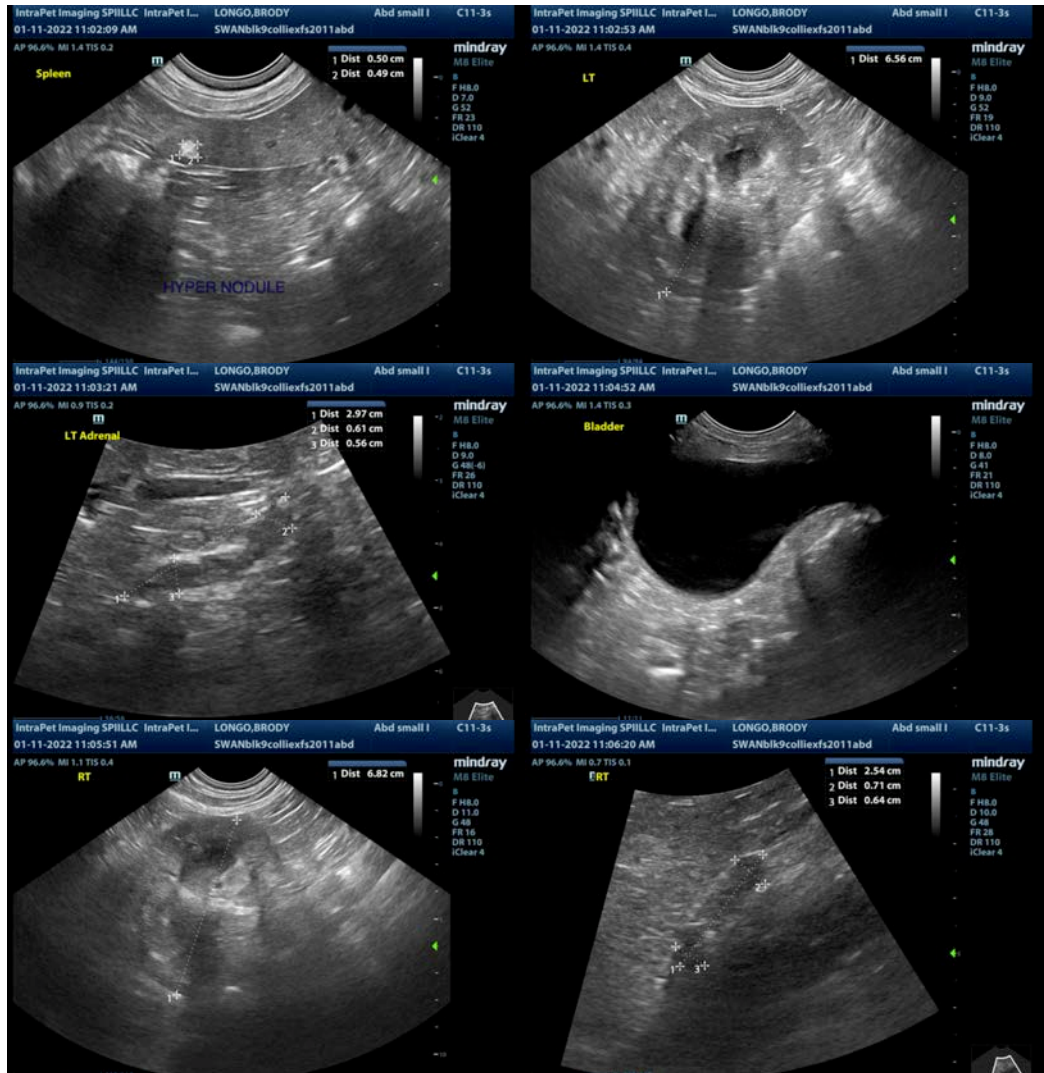
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

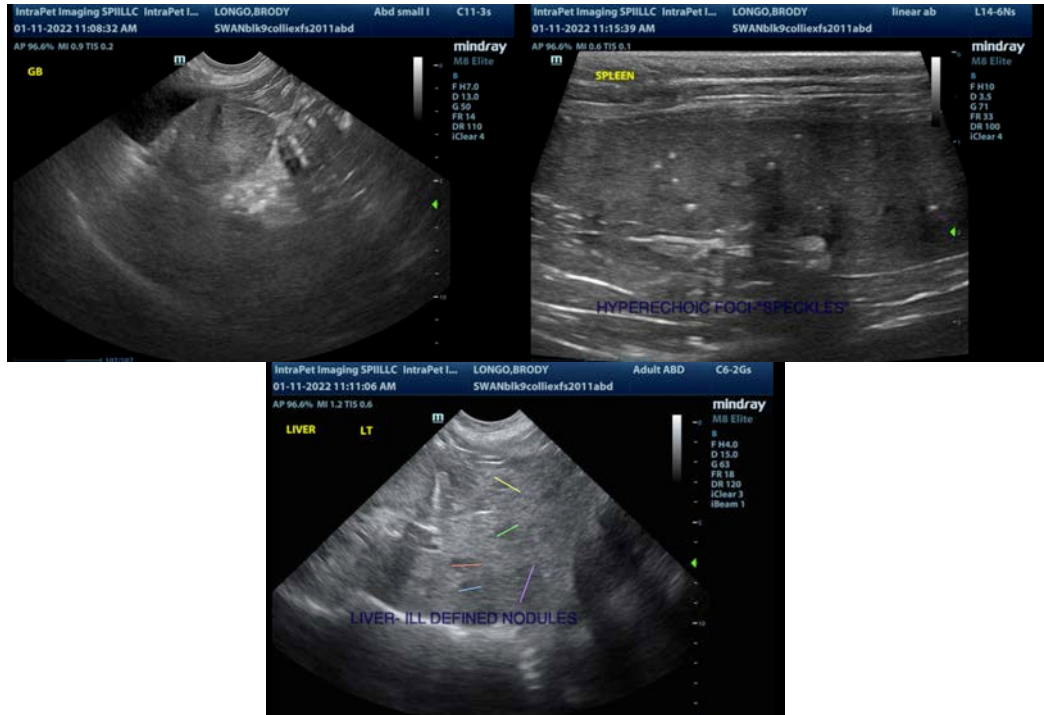
Correlate today's ultrasound findings with bloodwork results. The liver is severely heterogeneous and somewhat nodular, but this can represent benign hepatic disease in an older pet. Additionally, there are some hyperechoic mineralized foci within the spleen, which are likely benign, but a fine needle aspirate of both the liver and spleen would be necessary to get more information.

Additionally, the gallbladder has large sludge, and some of this is accumulating on the gallbladder wall. Consider starting Ursodiol and monitoring the gallbladder closely.

The changes reported in the kidneys could be consistent with renal disease or age related change. Correlate with bloodwork +/- urinalysis, culture, blood pressure, and Leptospirosis testing.

Recommend 3-view thoracic radiographs if not already done.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com