

**DATE**

9/30/22

PATIENT

Lucy Smith

SPECIES

Canine

BREED

Sheltie

SEX

Spayed Female

AGE

3/30/07

WEIGHT

23.7 Pounds

INTERPRETED BYEric Lindquist, DMV
DABVP, Cert. IVUSS**IMAGING PERFORMED BY**Stephanie Warga
RDMS, RVT**HOSPITAL NAME**

Abbey AH

REFERRING VET

Dr. Kluttz

INVOICE

41826

PRESENTING CLINICAL SIGNS

Presented on 9/24/22 for ADR/PD/Anorexia. QAR in clinic. MM+ pink, CRT <2 seconds, severe dental disease grade 4/4. CV & Lungs NSF. On abdominal palpation mild, generalized sensitivity was noted. Temperature was 102.4 degrees F.

Current Medications: Metronidazole 250mg ½ BID, Clavamox 125mg BID, Cerenia 60mg ½ SID.

Lab Results: Moderate liver failure.

Radiographs: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Declined at this time.

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 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 and no evidence of pelvic dilation was present. Cortical infarcts noted, stable. The right kidney measured 4.66 cm. The left kidney measured 4.17 cm.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having largely normal shape, size, position and acceptable echogenicity for this age group and breed. Some heterogeneity was noted within the adrenal parenchyma without concerning capsular distortion. These changes are likely age related but should be monitored by sonogram should the patient be suspected of having adrenal disease. The right adrenal gland measured 1.9 cm x 0.80 cm at the cranial pole and 0.50 cm at the caudal pole. The left adrenal gland measured 2.52 cm x 0.57 cm at the caudal pole and 0.58 cm at the cranial pole.

Spleen

The **spleen** was uniformly enlarged with relatively uniform parenchyma without evidence of masses. The capsule was mildly swollen. This is most consistent with hypersplenism and reactive hyperplasia deriving from splenic white or red pulp. However, early infiltrative disease, such as lymphoma or mast cell neoplasia can, at times, present in this manner but not suspected. 25g US-guided FNA would be best in order to ensure only reactive hyperplasia is present. If clinical signs fit with potential neoplasia or mast cell disease, then Benadryl injection (1 mg/pound IM) 15 minutes prior to FNA would be recommended.

Liver

The **liver** was mildly swollen. Multifocal hypoechoic nodules noted, non-disruptive. The caudal aspect of the left lateral liver lobe revealed a pedunculated hepatoma type lesion measuring approximately 3.0 cm. The gallbladder presented minor polypoid changes and minor debris. No evidence of mucocele formation. Some enhanced mesentery was noted around the gallbladder, consistent with cholangitis and edematous wall.

Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

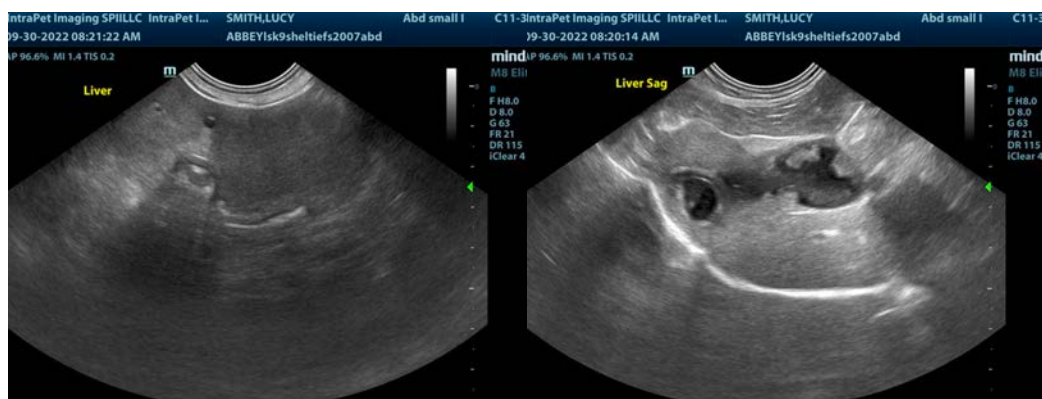
ULTRASONOGRAPHIC FINDINGS

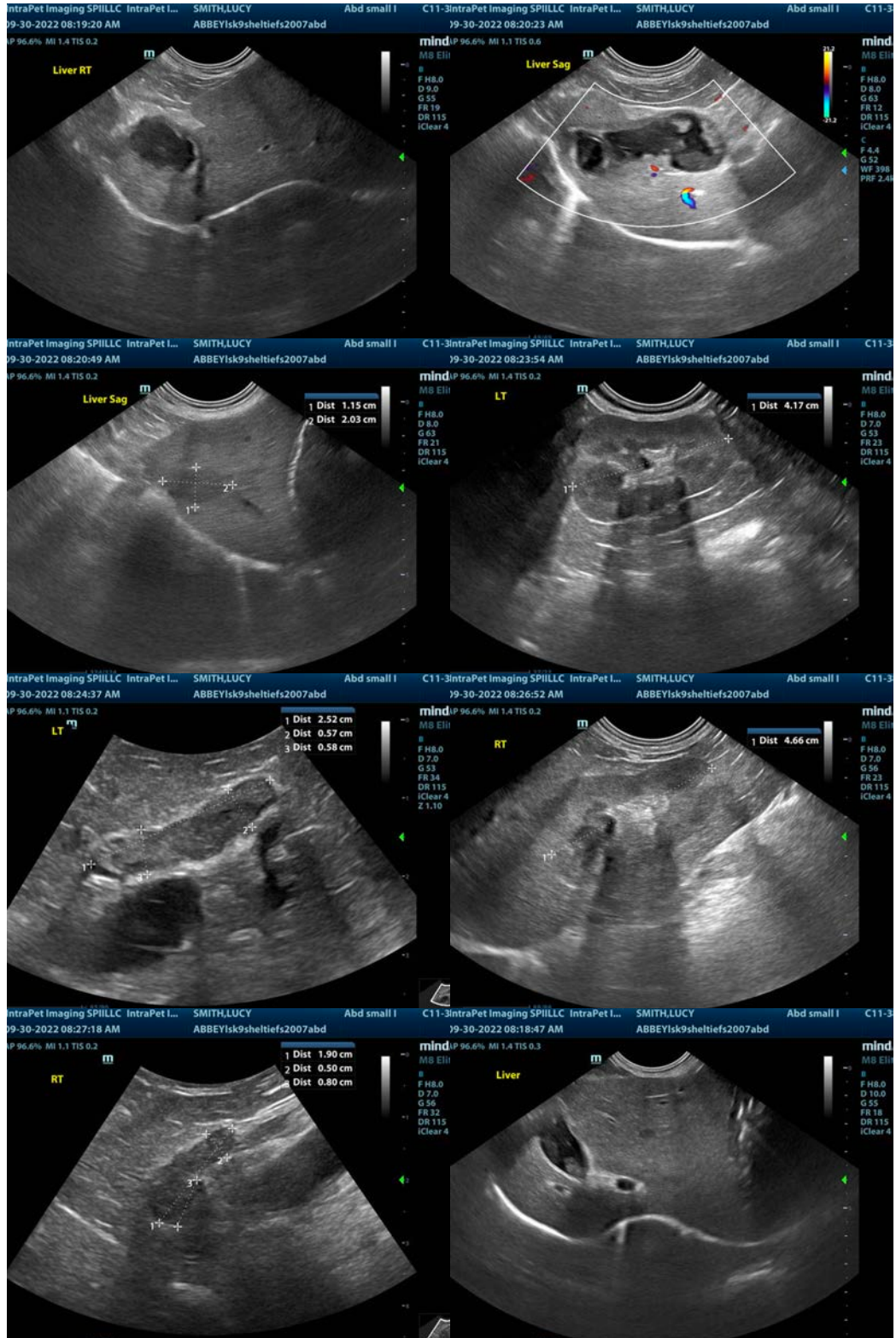
- Undefined nodular hepatic changes with chronic cholangitis liver pattern and polypoid gallbladder changes
- Hypersplenism
- Age related renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No overt mucocele formation. However, I cannot completely rule out the potential of mucocele rupture in this patient. FNA of the liver nodules warranted to ensure neoplasia is not an issue. FNA of the left lateral liver lobe and general hepatic parenchyma indicated. Leptospirosis titers indicated. FNA of the spleen indicated. Treatment for cholangitis warranted. If the liver cytology is benign, then left lateral lobectomy + cholecystectomy should be considered in this patient. Emerging round cell neoplasia is a possibility, therefore cytology is essential.

Radiographs: Hepatosplenomegaly with irregular contour.





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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