

DATE
12/21/21

PRESENTING CLINICAL SIGNS

History: elevated liver enzymes on preoperative bloodwork, asymptomatic.
Lab Results: Attached separately.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Butorphanol 0.66cc IV.
Stat Report: Not requested.

PATIENT

Daisy Feathers

SPECIES

Canine

BREED

Labrador Retriever

SEX

Intact female

AGE

1/17/13

WEIGHT

72 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Rachel Brillhart RDMS

HOSPITAL NAME

Swan Creek VC

REFERRING VET

Dr. O'Connor

INVOICE

94809

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 was noted. Ureteral papillae were normal.

The right ovary measured 1.53 x 1.15 cm. The left ovary measured 1.33 x 0.72 cm. The uterus was slightly fluid filled. This is consistent with mucometra or emerging pyometra and measured up to 1.0 cm in width.

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The left kidney measured 7.03 cm. The right kidney measured 7.16 cm.

Adrenal Glands

Both **adrenal glands** were 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 2.63 x 0.97 cm at the caudal pole and 0.67 cm at the cranial pole. The right adrenal gland measured 2.84 x 0.85 cm at the caudal pole and 0.88 cm at the cranial pole.

Spleen

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

Liver

The **liver** revealed coarse architecture with increased portal markings and irregular contour with macronodular changes measuring up to 4.3 cm. The gallbladder and common bile duct were unremarkable.

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. 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 subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

ULTRASONOGRAPHIC FINDINGS

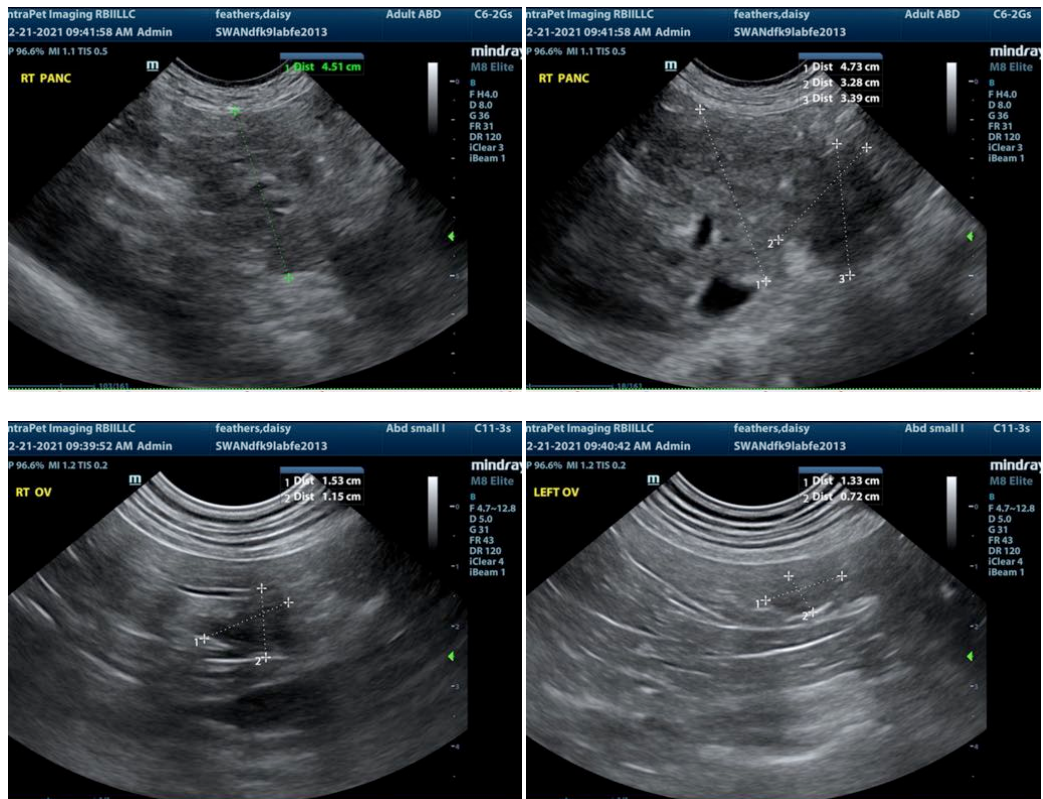
Moderate to severe hepatic remodeling.

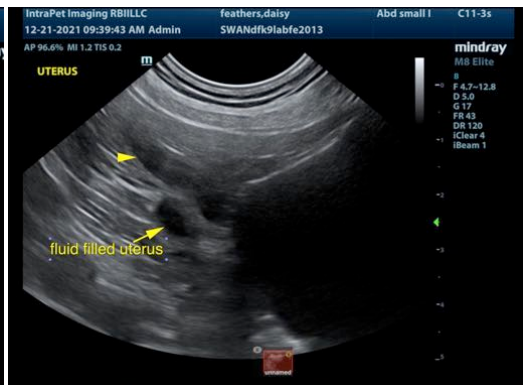
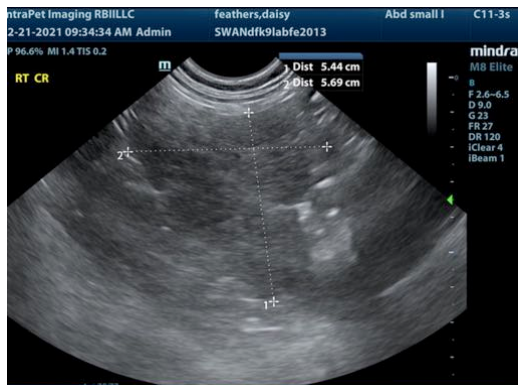
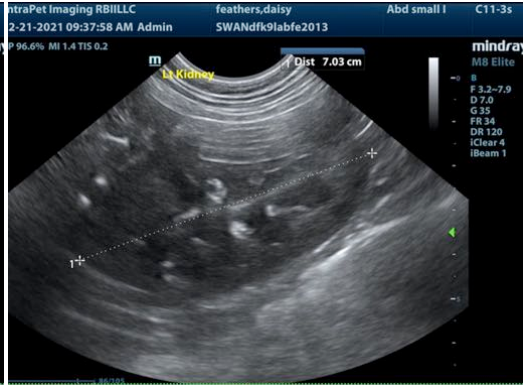
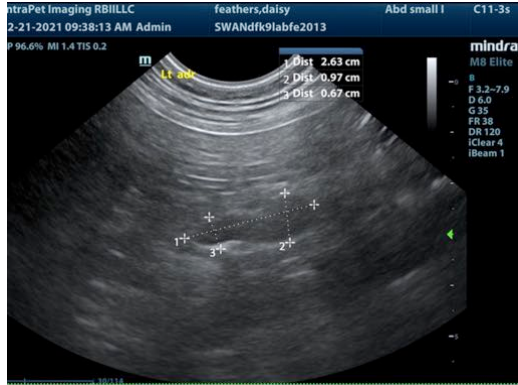
Chronic inflammatory hepatopathy pattern with irregular contour and macronodular changes. Minor potential for neoplasia. Fibrosis/cirrhosis is suspected.

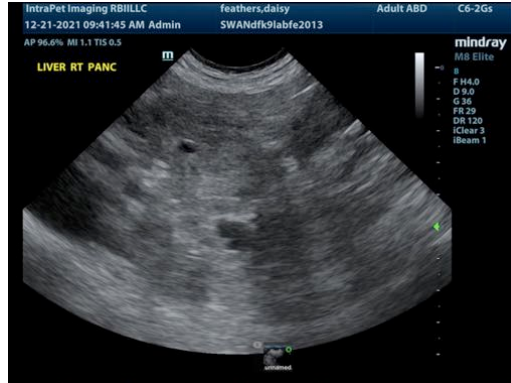
Fluid filled uterus, mucometra, pyometra is suspected unless active heat cycle.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Core liver biopsy is recommended. FNA may provide cursory evaluation. However, this is a structurally pathological presentation. If core biopsy is performed quantified copper is recommended given the breed and presentation. Prognosis is guarded.







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.

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