

**DATE PRESENTING CLINICAL SIGNS**

3/3/22

Seen for severe dental disease. Pot-bellied appearance and some firmness to cranial abdomen noted on exam. Hx of elevated liver enzymes in the past. Liver enzymes further elevated on BW from this exam.

PATIENT

Chloe Gmahl

Current Medications: Hepato support supplement - 1 capsule BID, started 1 week ago

SPECIES

Canine

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

BREED

Schnoodle

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

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.

AGE

2011

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. The right kidney measured 4.64 cm with slight pyelectasia of 0.22 cm. Minor pinpoint mineralizations noted. The left kidney measured 4.72 cm with pinpoint mineralization of 0.20 cm.

WEIGHT

22.36 Pounds

INTERPRETED BYEric Lindquist, DMV
DABVP, Cert. IVUSS**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 right adrenal gland measured 2.28 cm x 0.63 cm at the caudal pole and 0.82 cm at the cranial pole. The left adrenal gland measured 1.79 cm x 0.65 cm at the caudal pole and 0.54 cm at the cranial pole.

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Healing Paws VWC

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 were noted.

REFERRING VET

Dr. Preston

Liver**INVOICE**

35891

The **liver** presented heterogenous parenchyma with increased portal markings and coarse architecture. Slight undulating capsular contour was noted. Multiple gallbladder calculi noted, non-obstructive, measuring up to 4.0 mm. This is consistent with chronic inflammatory hepatopathy.

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

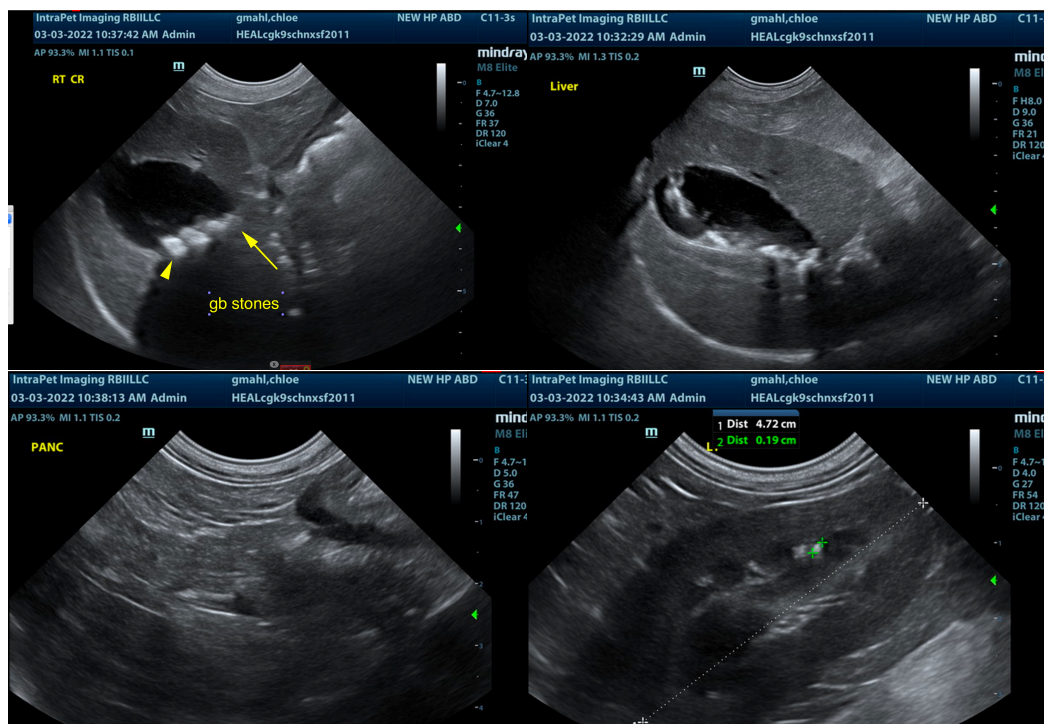
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxyphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

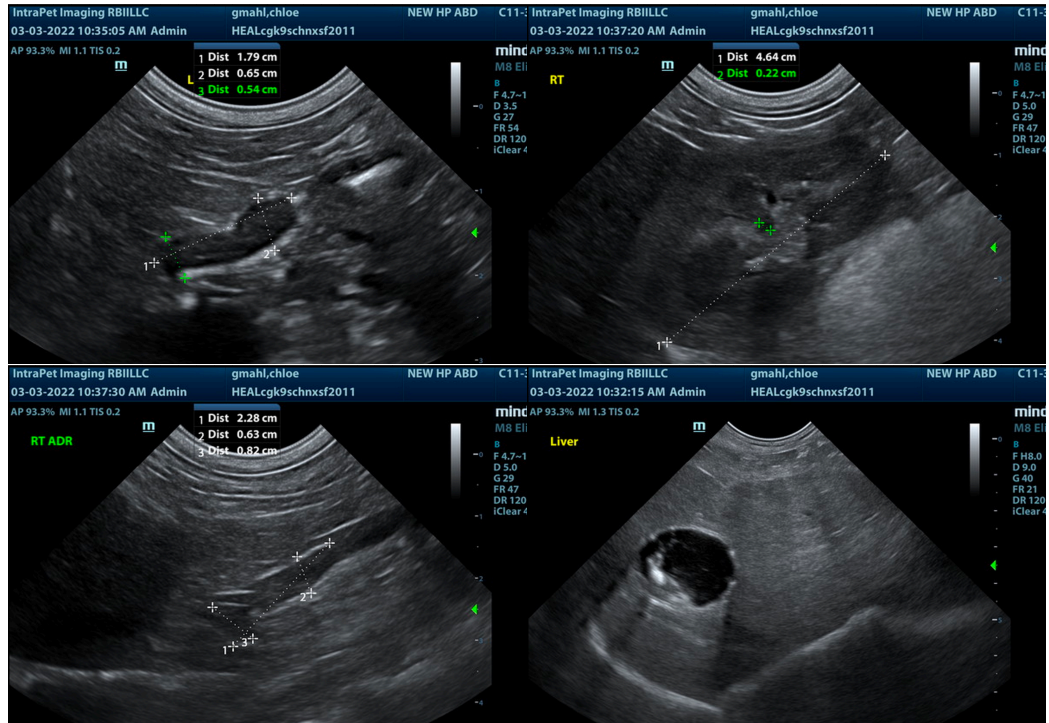
ULTRASONOGRAPHIC FINDINGS

- Subjectively benign hepatopathy with gallbladder calculi

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

FNA of the liver could be considered for further definition of inflammatory cell type. Ursodiol therapy could be considered to attempt to dissolve the gallbladder calculi. However, this is highly variable patient in effectiveness. No obstructive disease noted at this time. However, this can occur spontaneously at any time with lodging of the gallbladder calculi in the duodenal papillae or common bile duct. No evidence of neoplasia. Preventative cholecystectomy could be considered with liver biopsy for further definition and common bile duct lavage, yet no obstructive disease noted that would necessitate this overtly.





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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