

**DATE**

11/18/22

PATIENT

Shae Emberson

SPECIES

Canine

BREED

Yorkie X

SEX

Spayed Female

AGE

11/1/10

WEIGHT

11.2 Pounds

INTERPRETED BYEric Lindquist, DMV
DABVP, Cert. IVUSS**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

HOSPITAL NAME

Banfield Timonium

REFERRING VET

Dr. Borrison

INVOICE

42869

PRESENTING CLINICAL SIGNS

Approximately 1 month history of elevated ALT, post meal bile acids elevated in October. Recheck bile acids after ~3 weeks of Denamarin showed levels WNL. Routine chest rads included cranial abdomen and there is mineralization in the area of the gall bladder/liver.

Current Medications: None listed.

Radiographs: Attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Declined.

Stat Report: Not requested.

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. The right kidney measured 3.82 cm. The left kidney measured 3.39 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 right adrenal gland measured 1.72 cm x 0.61 cm at the caudal pole and 0.60 cm at the cranial pole. The left adrenal gland measured 1.48 cm x 0.48 cm at the caudal pole and 0.57 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 were noted.

Liver

The **liver** presented minor increased portal markings. The gallbladder revealed sand accumulation, a grouping of which measured approximately 2.0 cm, non-obstructive at the time of the sonogram. The patient is likely passing biliary granules periodically and may be influencing the history of bile acid elevation. Gallbladder sand grouping measured 2.4 cm.

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

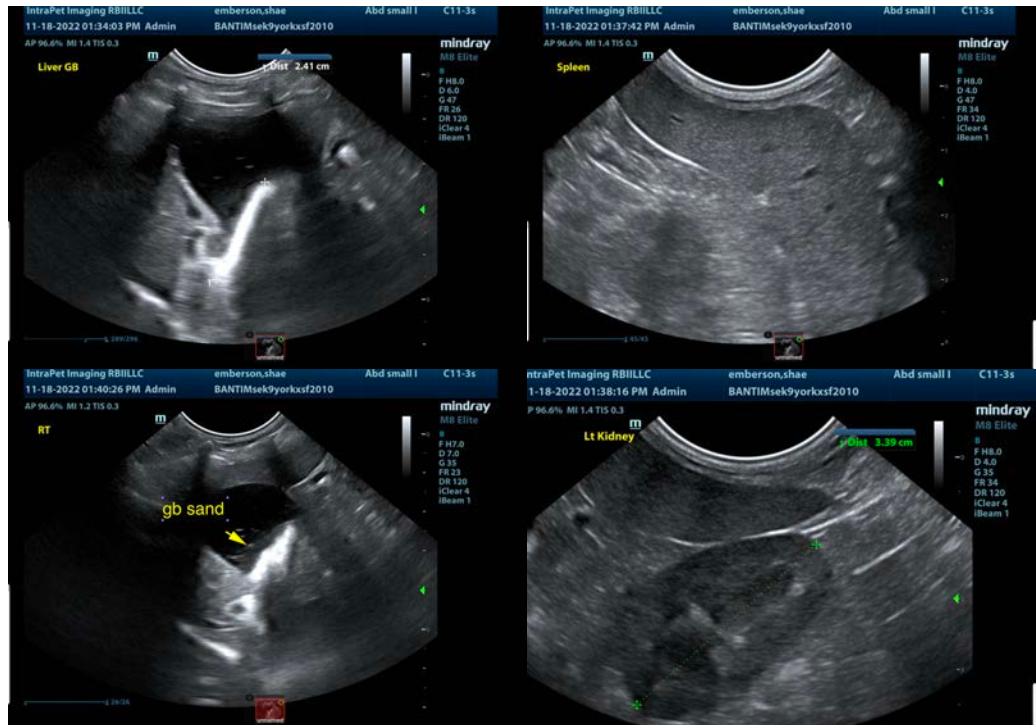
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

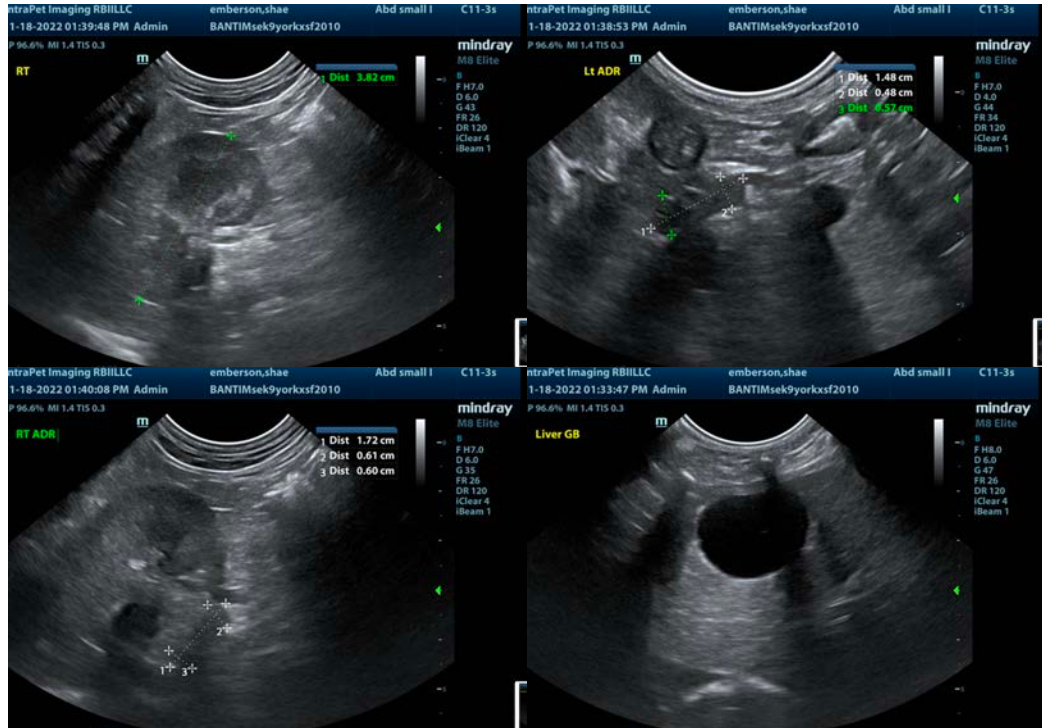
ULTRASONOGRAPHIC FINDINGS

- Gallbladder sand, non-obstructive at the time of the sonogram
- Slight inflammatory hepatopathy pattern, unremarkable abdomen otherwise

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Ursodiol therapy could be considered to attempt to dissolve the biliary sand. However, this is highly variable in effectiveness patient to patient.





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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