

**DATE PRESENTING CLINICAL SIGNS**

12/22/21 History: 7 yo MN Golden Retriever. 1 week history of lethargy. Decreased appetite; will eat but takes a while to finish food/comes back to it. Marked lethargy.

PATIENT Current Medications: Cerenia: 80 mg SID.

TJ Krabitz Lab Results: BW not performed, 3-V CXR not performed to prioritize ultrasound.

Radiographs: Rads show gastric distension with mass effect causing displacement of intestines. No pericardial effusion.

SPECIES Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Canine Sedation: Not required for a full diagnostic ultrasound.

Stat Report: **Requested.**

BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Golden Retriever

Urinary System**SEX**

Neutered Male

The **urinary bladder** and visible pelvic urethra were unremarkable for the level of repletion presented. The urine, however, did present some mildly echogenic debris consistent with mucous, exfoliated cells from renal or bladder origin, and/or blood clots as these echogenic changes can all present similarly. This is often related to urinary tract infection but may represent simple evidence of exfoliated debris or sterile inflammation. Cystocentesis, urinalysis, +/- culture would be recommended to rule out and define any UTI.

AGE

10/21/14

WEIGHT

77 Pounds

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 right kidney measured 6.59 cm. The left kidney measured 7.69 cm.

INTERPRETED BY

Eric 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 2.8 cm x 0.71 cm at the caudal pole and 0.83 cm at the cranial pole. The left adrenal gland measured 3.5 cm x 0.71 cm at the caudal pole and 0.85 cm at the cranial pole.

IMAGING PERFORMED BY

Stephanie Pearce
RDMS, RVT

Spleen**HOSPITAL NAME**

Paradise AH

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. Riehl

Liver**INVOICE**

33627

The **liver** was diffusely hyperechoic to falciform fat. The gallbladder and common bile duct were unremarkable.

Gastrointestinal

The **stomach** was overdistended with mildly echogenic fluid. Hyperperistaltic, edematous small intestine present. Transiting soft foreign body noted measuring 1.5 cm with other smaller soft foreign matter. The

pylorus appeared mildly thickened with inflammatory pattern and nebulous mural changes. Minor reactive mesentery noted around the small intestine. Some other shadowing chyme/material present in the stomach with significant stasis. The colon was unremarkable.

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.

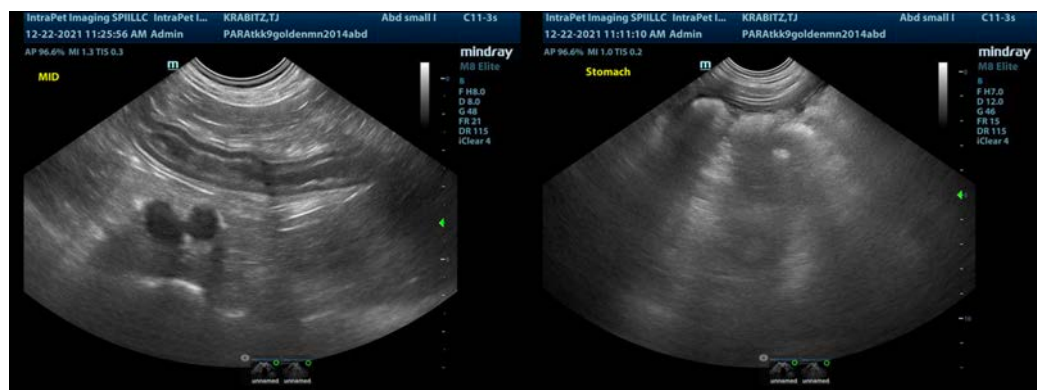
ULTRASONOGRAPHIC FINDINGS

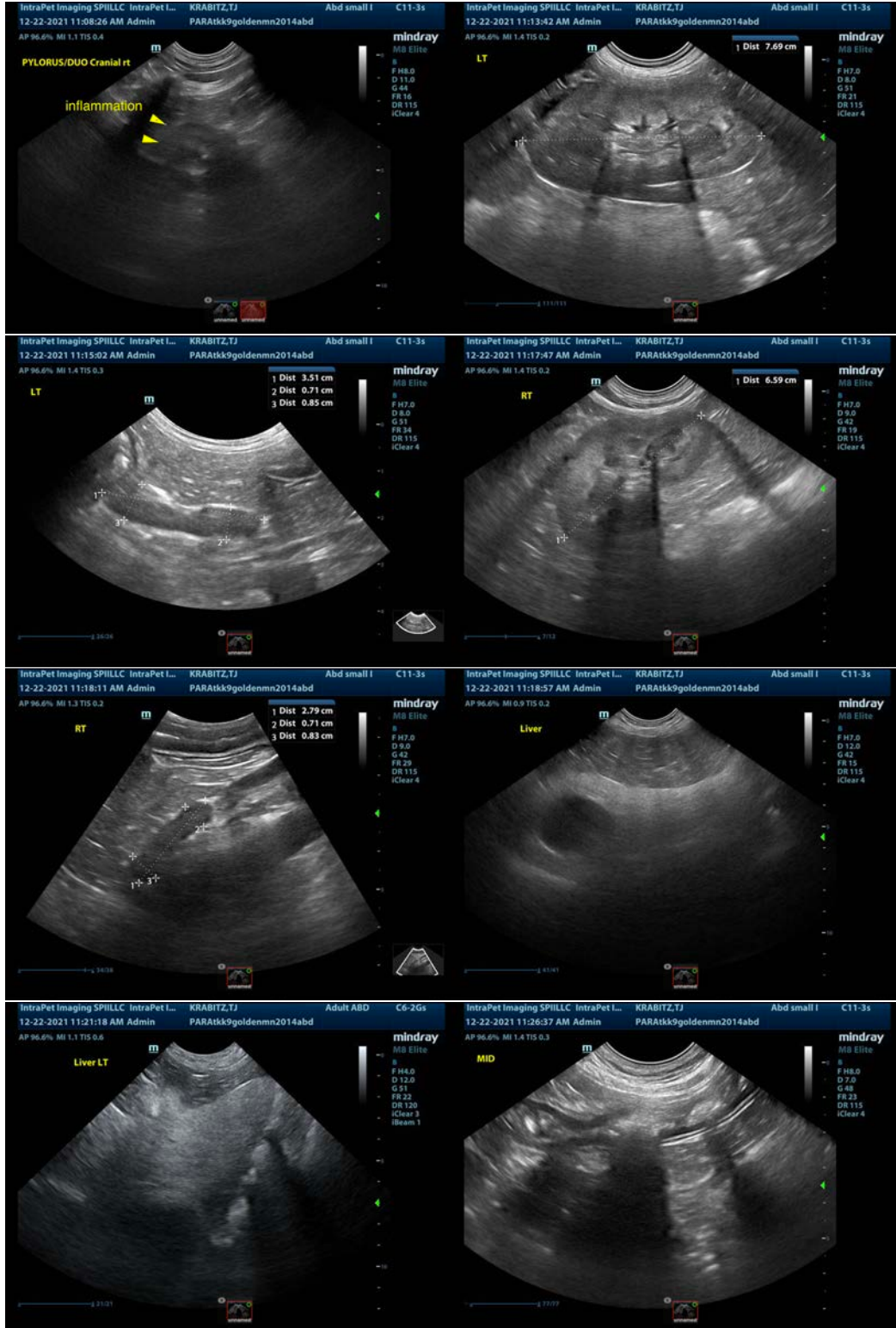
- Gastroenteritis with small, soft transiting foreign material and variable gastrointestinal thickening – underlying chronic inflammatory disease suspected.
- Hepatic lipidosis liver pattern

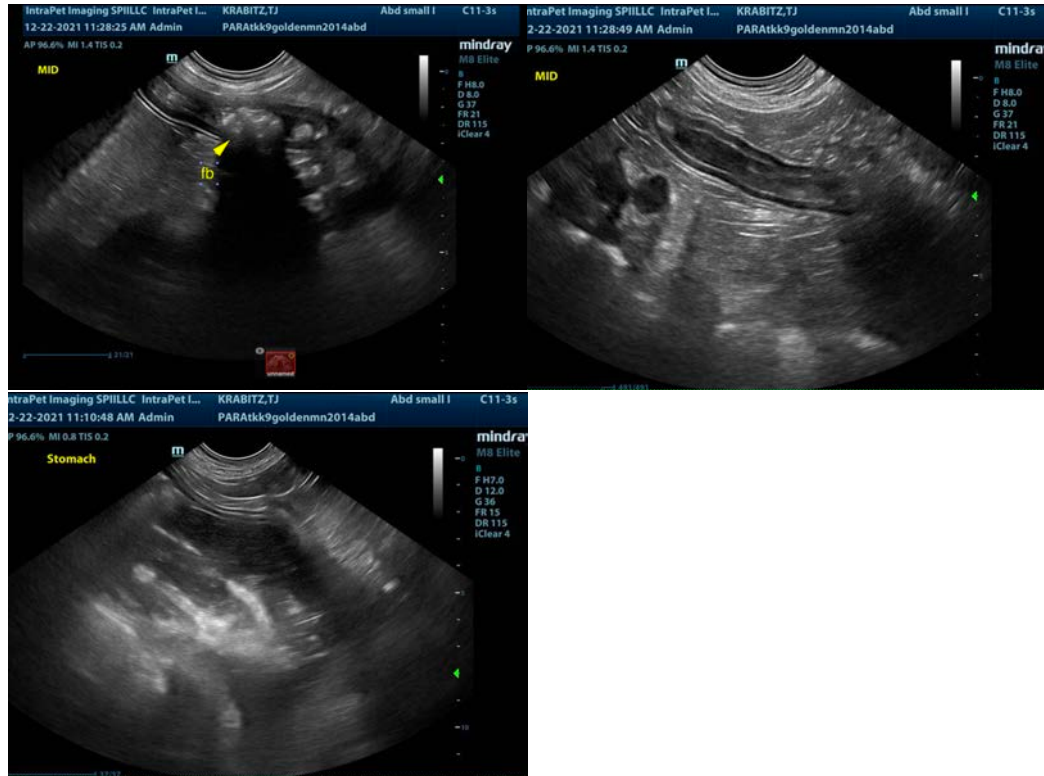
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is not full obstruction in this patient, and the soft material transiting may pass with medical therapy and plasma expansion. However, it would not be wrong to explore in order to obtain GI biopsies and evacuate the upper gastrointestinal tract. If surgery is to be performed, liver biopsy is warranted for long-term management. Eventual bile acid profile would be indicated. If conservative therapy is to be taken, which is a completely viable approach in this patient in my opinion, aggressive GI protectants, broad-spectrum antibiotics, and plasma expanders all indicated. Recheck sonogram in 24 hours, earlier if clinical decline occurs. I recommend a fresh fecal smear and fecal floatation analysis. The evaluation of this report should take into consideration when the patient was fed prior to the sonogram.

According to Sonopath research presented at ECVIM 2016 (Stockholm, Sweden), Advances in Small Animal Medicine and Surgery (May 2017), and EVDI 2017 (Verona, Italy), concurrent underlying chronic inflammatory neoplastic intestinal disease can often reside in PICA patients. Therefore, surgical biopsies are essential in this case regardless of the exploratory findings.







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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com