

**DATE**

4/1/22

**PRESENTING CLINICAL SIGNS**

Few day history of vomiting and Anorexia, diarrhea, lethargic, jaundiced.

**PATIENT**

Boh Wild

Current Medications: None yet.

Lab Results: Neutrophilia, Monocytosis, Elevated ALT, ALP, Tbili, Cpli.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Patient was sedated with Torbugesic.

Stat Report: DVM requested STAT.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****BREED**

Rhodesian Ridgeback

**SEX**

Neutered Male

**AGE**

7/31/12

**WEIGHT**

72 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Andi Parkinson RDMS

**HOSPITAL NAME**

Timonium AH

**REFERRING VET**

Dr. Stephens

**INVOICE**

36655

**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 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 kidneys measured 6.0 cm each.

**Adrenal Glands**

The **right adrenal gland** revealed a hyperechoic mass measuring 3.0 cm. Capsular expansion noted without capsular escape or vascular invasion. The caudal pole of the right adrenal measured 0.5 cm. The mass appears resectable. The **left adrenal gland** was slightly irregular at the caudal pole, measuring 7.0 mm and 5.0 mm 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** was uniformly swollen with mild increased portal markings. The gallbladder was overdistended, chronically thickened and echogenic with striating bile. The tissue around the cystic duct and common bile duct was inflamed. The common bile duct was dilated with echogenic debris. Common bile duct measured 9.0 mm in width. Enhanced mesentery noted throughout the extension of the common bile duct. Hepatic lymph nodules were slightly enlarged at 1.0 cm. The mucoduct pattern continued to the level of the duodenal papilla, persistently measuring 8-9 mm in width, which is more than twice normal. The gallbladder was serpentine in contour and measured approximately 9.0 cm from cystic duct to apex by 4.0 cm in width. This is a tubular, atypical mucocele. Significant inflammation was noted at the neck of the gallbladder and in the portal hilus around the common bile duct.

**Gastrointestinal**

The **pylorus** was thickened with hypertrophied mucosa, empty lumen. The small intestine and colon were unremarkable.

## Pancreas

The **pancreas** revealed mixed hypoechoic parenchymal changes with hyperechoic surrounding enhanced fat, primarily in the right limb. Heterogeneous right limb.

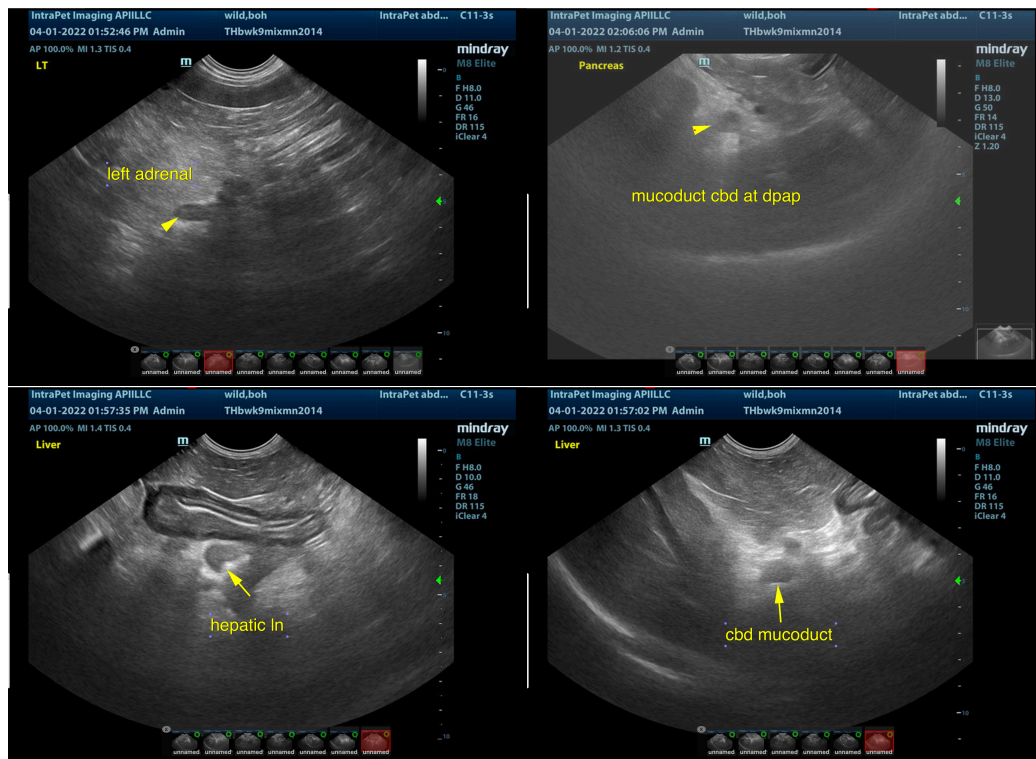
## ULTRASONOGRAPHIC FINDINGS

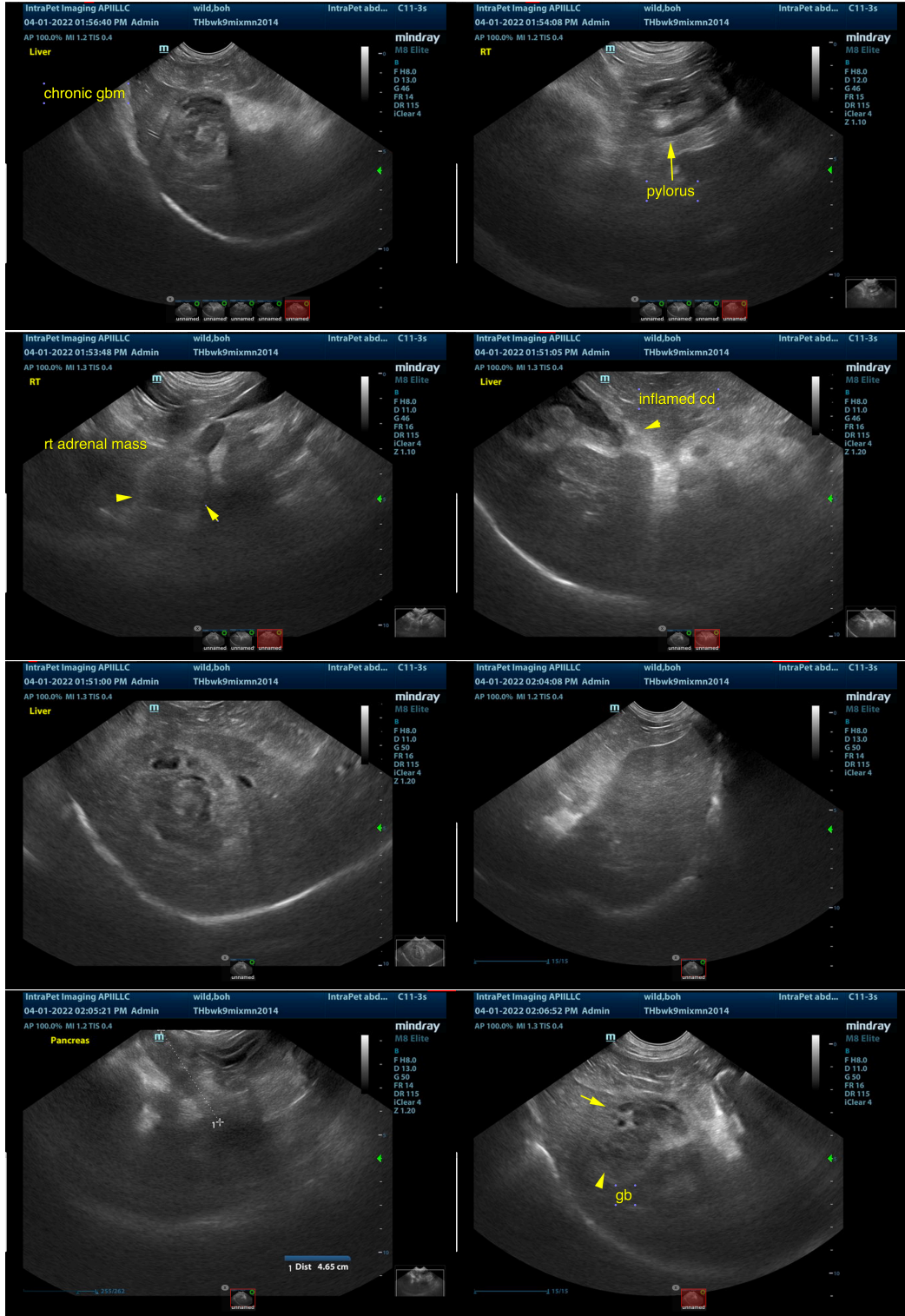
- Chronic gallbladder mucocele with mucoduct and cholangiohepatitis
- Right adrenal mass – likely adenoma, possible carcinoma or pheochromocytoma
- Concurrent pancreatitis

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Surgical intervention is essential in this patient, as chronic cholangitis and mucoduct/mucocele formation is evident. Concurrent pancreatitis present and is likely a contributing factor, yet not the primary issue. Surgical intervention with cholecystectomy and common bile duct lavage +/- common bile duct deviation may be necessary. GI protectants and treatment for concurrent pancreatitis warranted.

Medical management will not resolve the gallbladder presentation. It may stabilize. However, the common bile duct is plugged with mucus from the level of the cystic duct, entry to the common bile duct, and to the extent of the duodenal papilla. Recommend right adrenalectomy at the time of surgery. Blood pressure measurements recommended. This patient is at high risk for bile peritonitis. I cannot rule out some leakage and reabsorption already occurring in this case. No overt evidence of neoplasia. J-tube placement post-surgery may be the best option for long-term management in this 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.

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