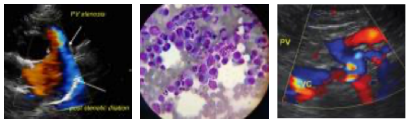
IMAGING PERFORMED BY

IntraPet.com



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

DATE

9.29.2022

PATIENT

Ryleigh Ripple

SPECIES

Canine

BREED

Pit Mix

SEX

Spayed Female

AGE

8/12/2013

WEIGHT

22.86kg

INTERPRETED BY

Andrea Nicastro, DMV, Diplomate DACVIM (Small Animal Internal Medicine)

HOSPITAL NAME

Banfield Towson

REFERRING VET

Dr. Chadha

INVOICE

11750

PRESENTING CLINICAL SIGNS

H/o vomiting episodes 1-2 times-a-day for 3 days. No diarrhea. Ate today and kept it down.

Current Medications: Denamarin, Cerenia, SQ fluids.
Lab Results: ALT 764, ALKP 602, GGT 20.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Patient sedated with Torbugesic & Dexdomitor.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is mildly distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The **left kidney** is normal size (5.83 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter

The **right kidney** is normal size (6.11 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter

Adrenal Glands

The **left adrenal gland** is normal size (0.81 cm at cranial pole) (0.64 cm at caudal pole) (2.54 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The **right adrenal gland** is normal size (0.59 cm at cranial pole) (0.57 cm at caudal pole) (2.31 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The **spleen** is normal in size (1.56 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The **liver** is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. A small amount of aggregated, echogenic, suspended debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The **stomach and intestine** are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly distended with liquid-appearing ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

The region of the **pancreas** is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

Free Abdomen

The **peritoneal cavity** is normal. There is no evidence of inflammation or effusion. The abdominal **lymph nodes** are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Minor age-related renal changes. The abdomen is otherwise unremarkable. An obvious cause for the patient's clinical signs and elevated liver values is not identified in this study. Top considerations include hepatic infection (i.e., Leptospirosis, bacterial cholangiohepatitis), and hepatotoxicity, particularly given the normal sonographic appearance of the liver. However, a more chronic issue (i.e., copper hepatotoxicosis or chronic active hepatitis) cannot be completely excluded.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

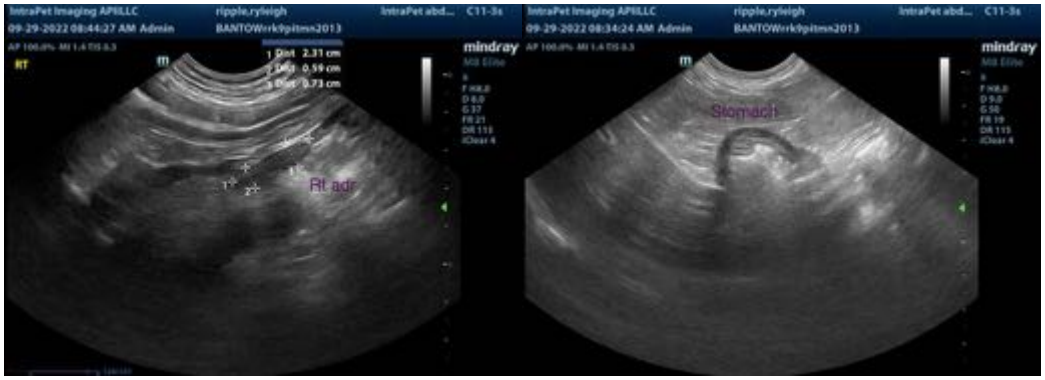
Leptospirosis testing (i.e., blood and urine PCR, serology)

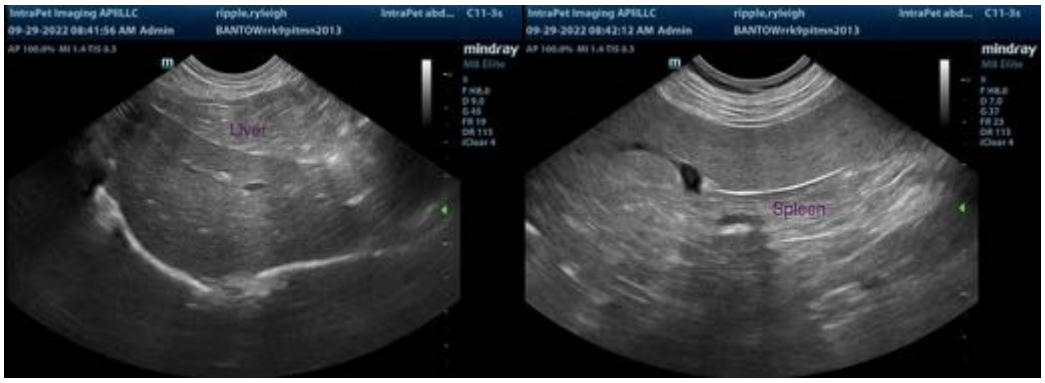
Consider pre-and postprandial serum bile acids to assess hepatic function, along with a PT and PTT to evaluate clotting status.

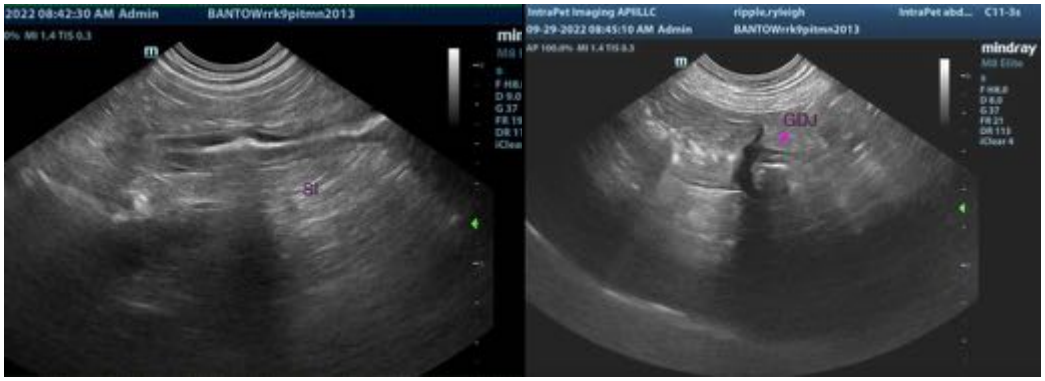
Consider hepatic tissue sampling (i.e., fine-needle aspirate or surgical biopsy). If surgical biopsies are pursued, aerobic and anaerobic bile cultures should be obtained as well as additional hepatic tissue samples for potential copper quantitation. While awaiting test results, empirical treatment for bacterial cholangiohepatitis/Leptospirosis/hepatotoxicity is recommended, including broad-spectrum antibiotics (i.e., amoxicillin-clavulanic acid), hepatic antioxidants and symptomatic care.

Given the patient's age, three-view thoracic radiographs are recommended to assess cardiopulmonary status.


Liver
LT
Lt adr


RT
Rt adr
Stomach


Liver
Spleen


Sr
GDJ

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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com