IMAGING PERFORMED BY

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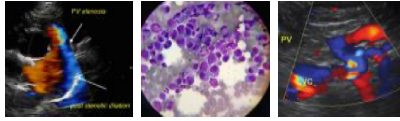

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DATE

11/2/21

PATIENT

Biscuit Rose Serpe

SPECIES

Canine

BREED

Jack Russell Terrier

SEX

Female, spayed

AGE

11/2/2013

WEIGHT

26.2 lbs.

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

HOSPITAL NAME

Eastern AH

REFERRING VET

Dr. Kaufman

INVOICE

12466

PRESENTING CLINICAL SIGNS

History: lethargy, elevating liver enzymes.
Current Medications: Denamarin.
Lab Results: elevating ALT, GGT, alk phos over 2 weeks
Radiographs: Not provided by the veterinarian.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Torbugesic and Alfaxan for FNA.
Stat Report: STAT report requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended. A small amount of suspended echogenic debris is observed within the lumen. 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 in size (5.54 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal in size 6.30 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is enlarged (0.89 cm at cranial pole) (0.83 cm at caudal pole) (3.14 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 enlarged (0.82 cm at cranial pole) (0.78 cm at caudal pole) (2.96 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 (1.68 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 prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion. The

gallbladder is of normal contours. A moderate amount of echogenic debris is observed within the lumen, some of which is gravity-dependent and some of which is adhered to the luminal wall. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal. A fine needle aspirate of the liver was performed during the study without incident.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. 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. No obstructive disease is noted.

Pancreas

The right limb of the pancreas is visible/prominent with slightly irregular peripheral contours. The parenchyma is subtly hypoechoic relative to surrounding omental fat. No distinct focal lesions are observed. The pancreatic duct is borderline dilated (up to 0.43 cm). Surrounding mesentery is mildly hyperechoic.

Free Abdomen

There is no evidence of free fluid. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- An obvious cause for the elevated liver enzymes is not identified in the study. However, a microscopic hepatopathy (i.e., bacterial cholangiohepatitis, Leptospirosis, chronic active hepatitis, copper-associated hepatotoxicity, infiltrative neoplasia (less likely)) should be considered.

- Gallbladder debris, non-mucocele.

- The pancreatic changes are consistent with mild acute or chronic active pancreatitis.

Secondary Findings:

- Mild bilateral adrenomegaly.

- Bilateral age-related renal changes with dystrophic mineralization.

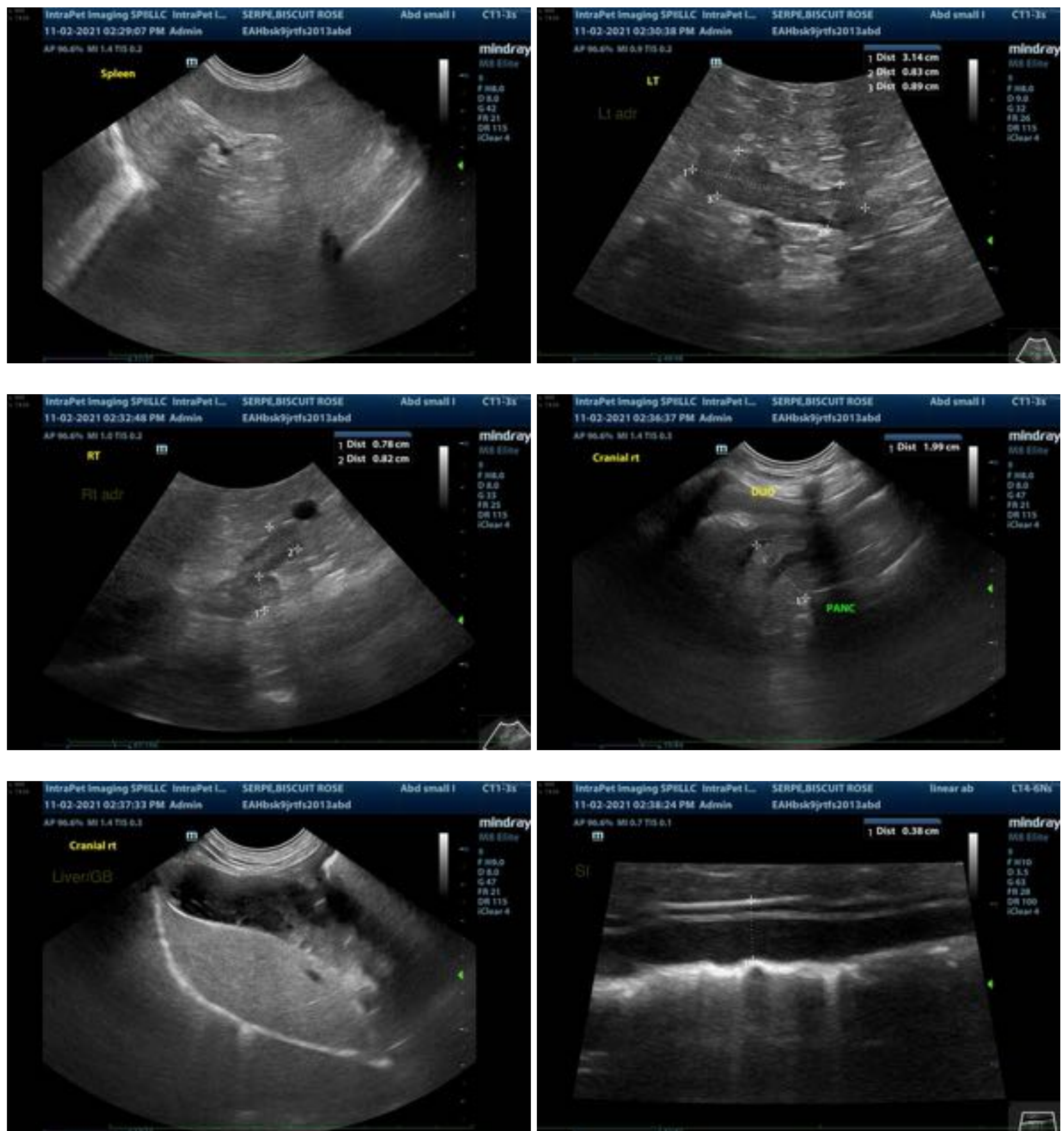
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

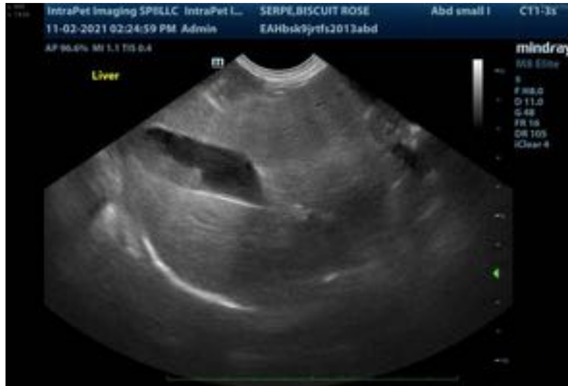
- If hepatic cytology results are inconclusive, a surgical liver biopsy with aerobic and anaerobic bile cultures +/- acquisition of additional hepatic tissue samples for possible copper quantitation may be necessary to get a definitive diagnosis. Also consider Leptospirosis testing (i.e., blood and urine

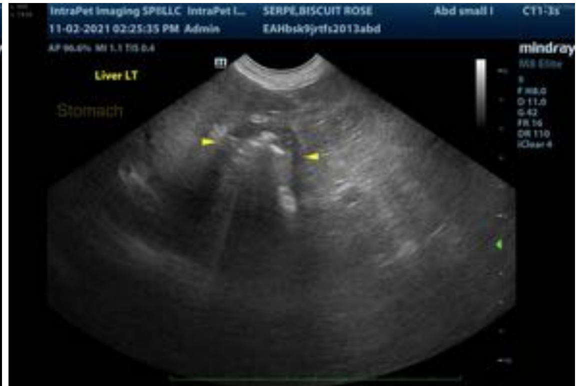
PCR, serology). Consider empirical treatment for bacterial cholangiohepatitis (i.e., Amoxicillin-clavulanic acid, Denamarin) while awaiting cytology results.

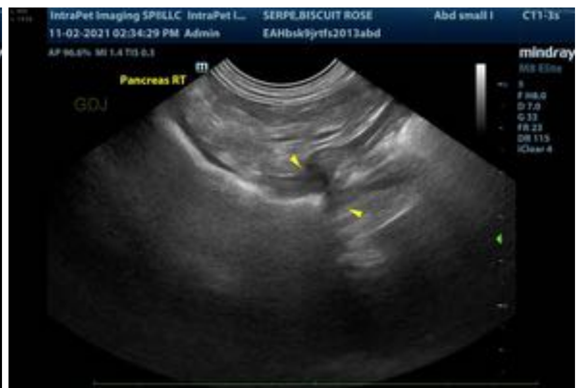
- Supportive care for pancreatitis is also warranted, particularly if the patient is exhibiting clinical signs.

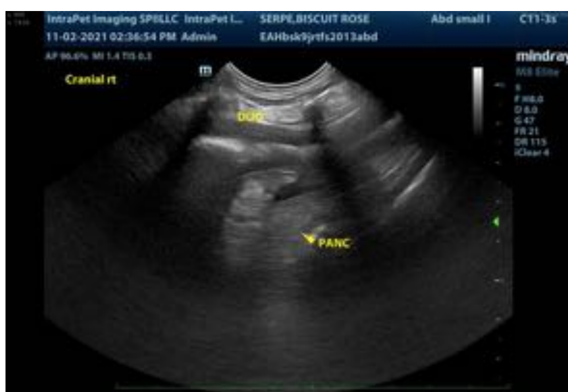
- Given the patient's age, three-view thoracic radiographs are recommended to assess cardiopulmonary status.











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.

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

Andrea.nicastro@sonopath.com