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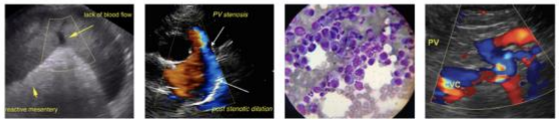

Charleston Mobile Veterinary Services
IMAGING PERFORMED BY
CharlestonMobile.Net 800.403.5408

PATIENT

Juliet McCarthy

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

Spayed Female

AGE

2/7/2011

WEIGHT

5 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

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

HOSPITAL NAME

Veterinary Dental Care

REFERRING VET

Dr. Suzy Shannon

INVOICE

10467

DATE

3/3/22

PRESENTING CLINICAL SIGNS

Clinical Exam Findings: Patient presented for what appears to be an alveolar bone fracture and avulsion of teeth 101,102,103 that the owner noticed on 2/28/22. There is also an oral mass, approximately 1/2cm in diameter distal to left mandibular incisor teeth. Juliet's referring veterinarian is Banfield Azalae Square and the owner reports Juliet has a history of elevated liver values. Her bloodwork results on 2/28/22 at Banfield revealed elevated ALT, ALP, and GGT. Today, we repeated bloodwork to plan pain medication and surgery and her liver values were greatly elevated.

Abnormal Labwork Values: ALP >2000, ALT 500's, GGT 58

Current Medications: Gabapentin and clindamycin, convenia administered today

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is pelvically located. The urinary bladder is moderately distended. The wall is normal in thickness with a smooth mucosal surface. No cystic calculi are observed. The region of the trigone is normal.

The left kidney is normal size (3.35 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (3.28 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.35 cm at cranial pole) (0.40 cm at caudal pole) (1.12 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 (0.74 cm at cranial pole) (0.46 cm at caudal pole) (1.78 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 (0.87 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 curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen with minor changes consistent with age-related remodeling. No focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion.

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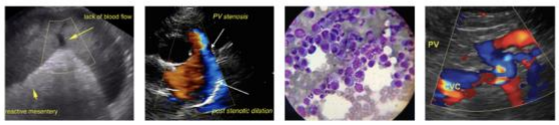

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The gall bladder is distended. The wall is normal in thickness. A large amount of mineralized sand, echogenic debris, and numerous, varying-sized choleliths are observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is mildly distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The small intestinal lumen is segmentally dilated with chyme. 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 or overt infiltrative disease is noted.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely hyperechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic 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.

Other

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

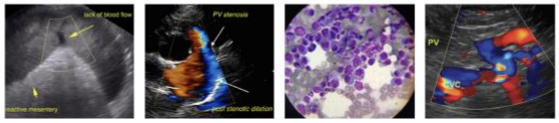
- Non-specific diffuse hepatopathy. Differentials include a benign process (i.e., age-related remodeling, vacuolar hepatopathy or regenerative nodular hyperplasia), inflammatory disease, hepatotoxicosis (i.e., copper), Leptospirosis or other hepatopathy. Neoplasia is possible but considered unlikely based on the sonographic changes.
- Numerous choleliths with no obvious evidence of a bile duct obstruction at this time.

Secondary Findings

- Minor age-related pancreatic and renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Pre-and post-prandial serum bile acids are recommended to assess hepatic function.
- Leptospirosis testing (i.e., blood and urine PCR, serology), should also be considered.
- If an aggressive approach to the elevated liver values is desired, a liver biopsy with aerobic and anaerobic bile cultures, as well as acquisition of additional hepatic tissue samples for potential



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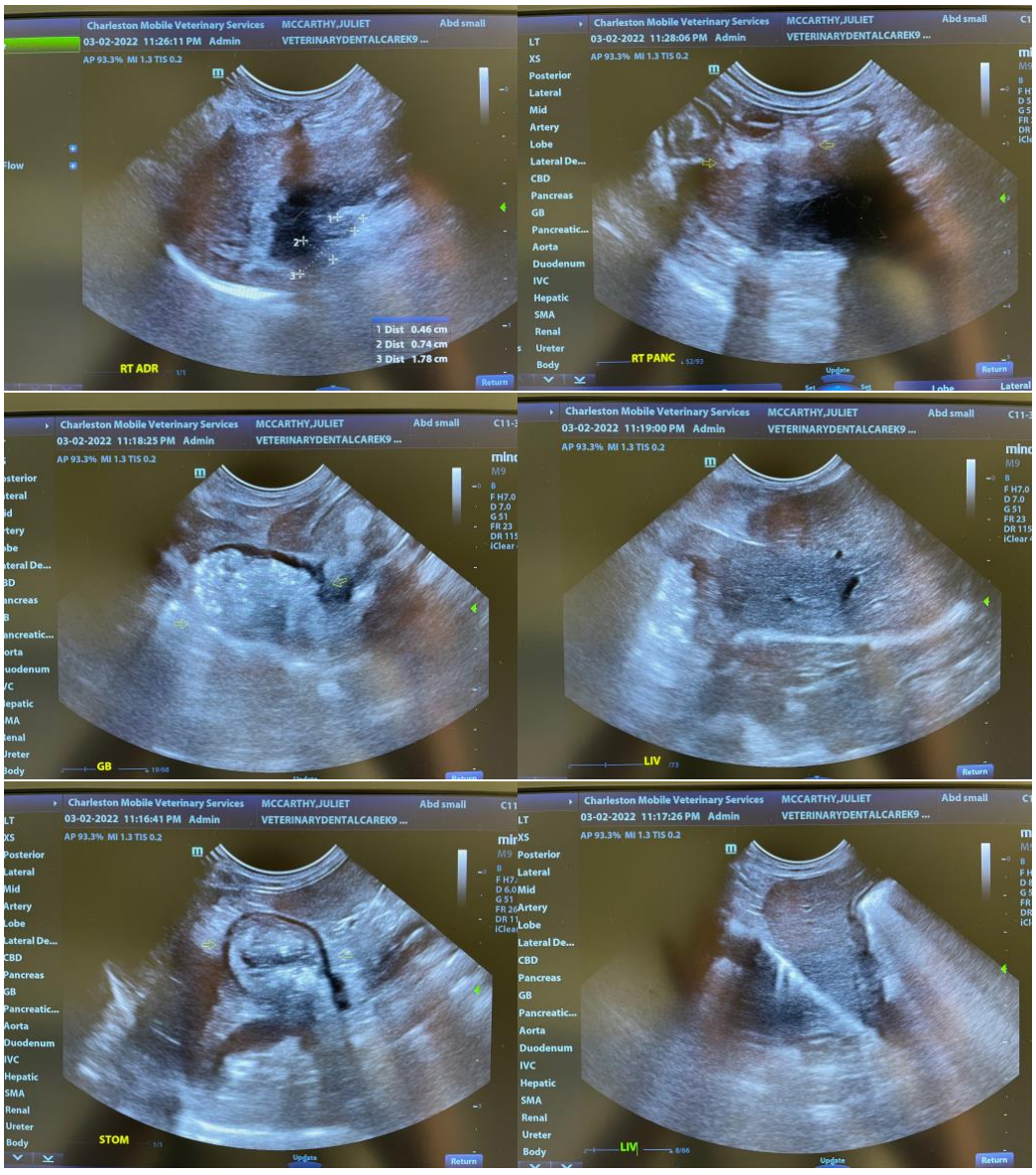
copper quantitation would be ideal. If a conservative approach is desired, consider empirical treatment for bacterial cholangiohepatitis (amoxicillin-clavulanic acid +/- metronidazole, Denamarin). If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued and hepatic tissue sampling reconsidered. If liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values. Regardless of the approach taken, serial monitoring (i.e., every 1-3 months, or sooner if problems arise) of the patient's liver values is recommended to assess for progression.

- If the patient is to undergo anesthesia, benzodiazepines should be avoided, and opioids should be used judiciously. Three-view thoracic radiographs are recommended prior to any anesthetic event to assess cardiopulmonary status.



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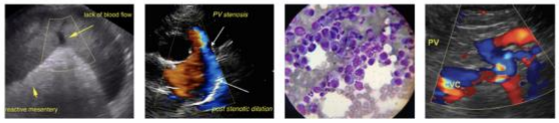

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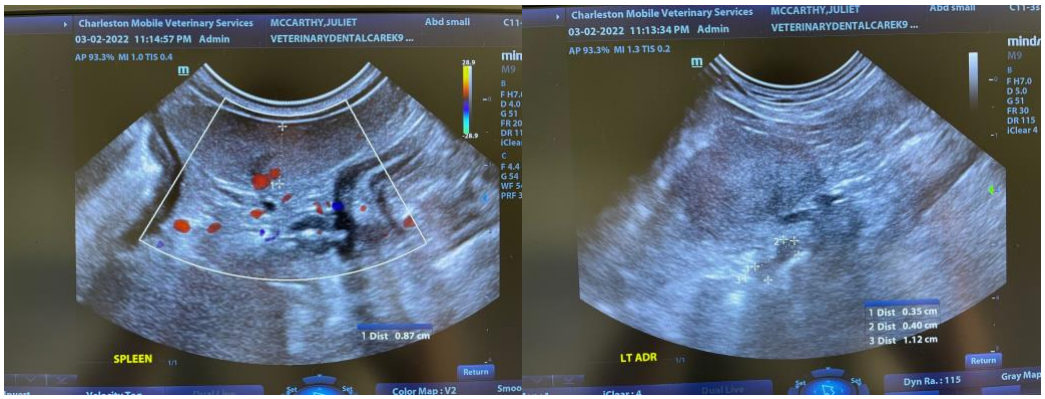

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
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