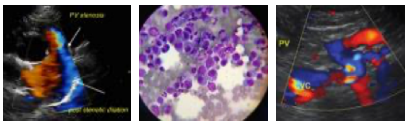
IMAGING PERFORMED BY

IntraPet.com



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

DATE
8/30/2021

PATIENT
Raven Drenning

SPECIES
Canine

BREED
French Bulldog

SEX
Female, intact

AGE
5/4/2020

WEIGHT
19.6 lbs.

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

HOSPITAL NAME
Eastern Animal Hospital

REFERRING VET
Dr. Michelotti

INVOICE
11970

PRESENTING CLINICAL SIGNS

History: Presenting for PU/PD and urinary accidents in the home.
PE unremarkable. BAR with normal vitals. BAS.

Current Medications: No current medications.
Lab Results: AST 142 (15-66), ALT 1112 (12-118), ALP 596 (5-131), GGT 32 (1-12), tBili 0.5 (0.1-0.3), Phos 6.4 (2.5- 6). USG 1.009. No protein in the urine.

Radiographs: Not provided by the veterinarian.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: not needed
Stat Report: not 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 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. There is no obvious evidence of ectopic ureters.

The left kidney is normal size (5.29 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (4.96 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal 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 (0.55 cm at cranial pole) (0.55 cm at caudal pole) (2.40 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 (0.56 cm at cranial pole) (0.65 cm at caudal pole) (2.38 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 (1.48 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 portal vein: caudal vena cava ratio is approximately 1:1, making a congenital extrahepatic portosystemic shunt unlikely. The gall bladder lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

Gastrointestinal
The gastric wall in the region of the fundus is normal in thickness with a normal layering pattern. In the region of the pyloric antrum, the wall is mildly thickened (up to 0.53 cm) with retention of the normal layering pattern. The gastric lumen is not distended. 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 pancreas is diffusely prominent in size with slightly irregular peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat and heterogeneous in appearance. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated. The mesentery effacing the serosal surface is mildly hyperechoic.

Free Abdomen
There is no evidence of free fluid. A 1.31 cm sublumbar lymph node is visualized. In addition, a 1.26 cm lymph node is observe in the right cranial quadrant. A few prominent mesenteric lymph nodes are also seen, the largest measuring 0.97 cm in length.

Other
The uterine body is visualized and is normal (0.67 cm in width).

The ovaries are normal in size (left ovary=1.36 cm x 0.62 cm; right ovary=1.22 x 0.56 cm) with normal shape and homogeneous parenchyma. No focal lesions are observed.

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)) cannot be excluded.

- The pancreatic changes are suggestive of acute or chronic, active pancreatitis.

Secondary Findings:

- The gastric wall thickening could be consistent with inflammation or may be a normal variant for this patient.

- The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Leptospirosis testing including blood and urine PCR, serology is recommended.

- Cytologic evaluation of the liver should be considered in this patient if clotting status is appropriate. A fine needle aspirate using a 25-gauge needle is recommended. If cytologic evaluation is inconclusive, consider a surgical liver biopsy with aerobic and anaerobic bile cultures and

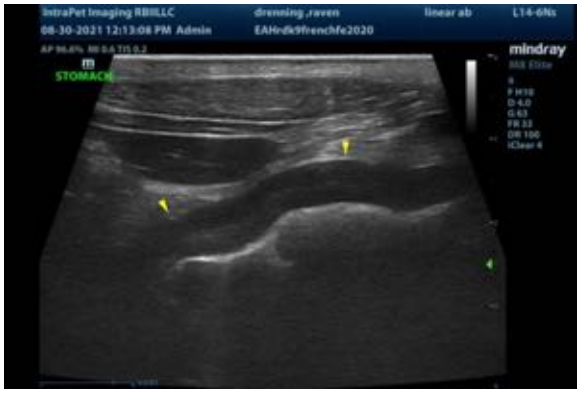
acquisition of additional hepatic tissue samples for copper quantitation.

- If a conservative approach is desired, consider empirical treatment for bacterial cholangiohepatitis (amoxicillin-clavulanic acid, Denamarin Advanced). 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.

- Three-view thoracic radiographs should also be considered to evaluate cardiopulmonary status.


IntraPet Imaging RBIILLC
drenning ,raven
Abd small I
C11-3s
08-30-2021 12:05:15 PM Admin
EAHrdk9frenchfe2020
mindray
RT OV
Dist 1.22 cm
Dist 0.56 cm

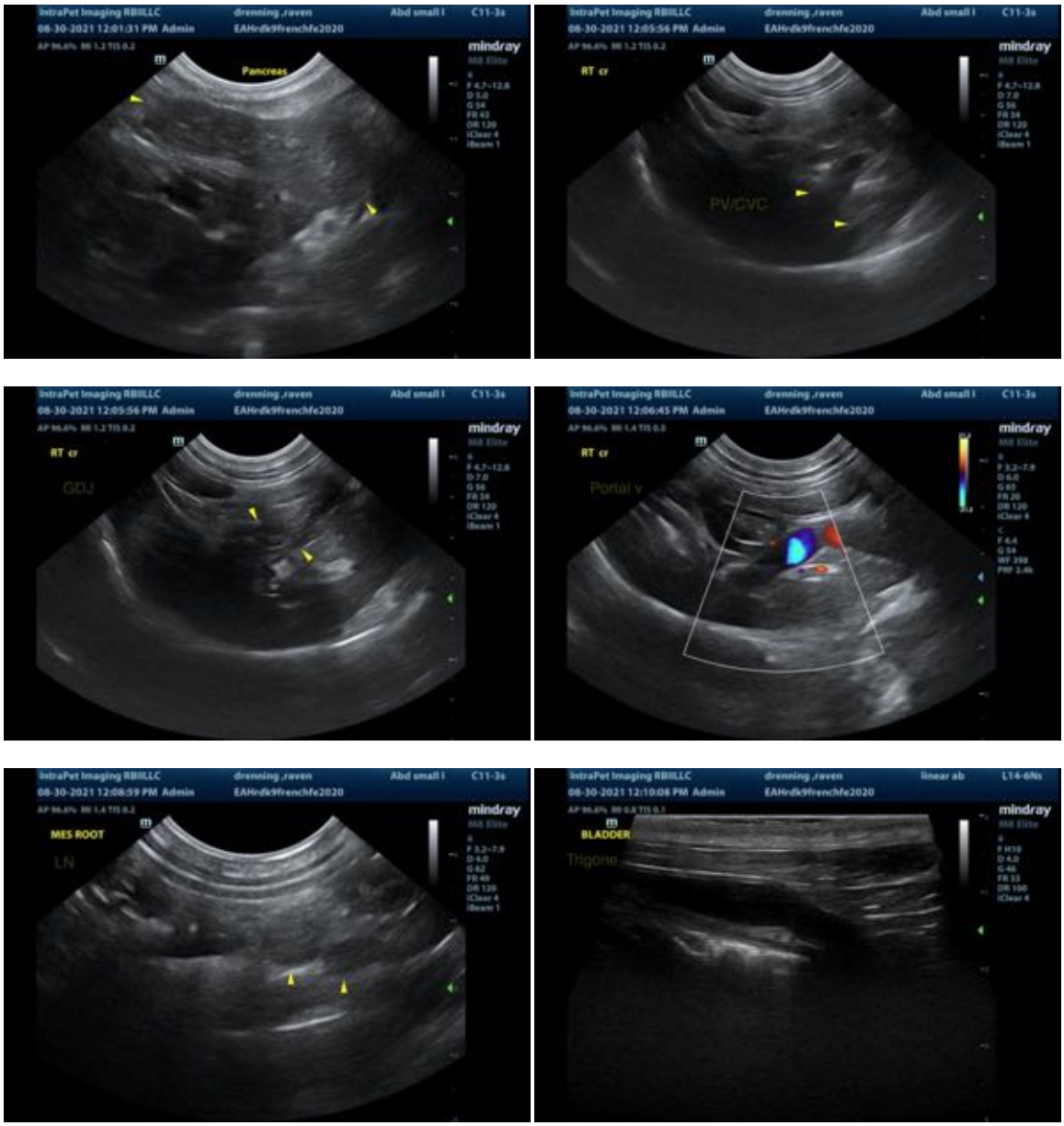

IntraPet Imaging RBIILLC
drenning ,raven
linear ab
L14-6Ns
08-30-2021 12:10:16 PM Admin
EAHrdk9frenchfe2020
mindray
BLADDER
Dist 1.31 cm
Sublumbar LN


IntraPet Imaging RBIILLC
drenning ,raven
linear ab
L14-6Ns
08-30-2021 12:13:08 PM Admin
EAHrdk9frenchfe2020
mindray
STOMACH


IntraPet Imaging RBIILLC
drenning ,raven
Abd small I
C11-3s
08-30-2021 12:02:00 PM Admin
EAHrdk9frenchfe2020
mindray
Lt adr


IntraPet Imaging RBIILLC
drenning ,raven
Abd small I
C11-3s
08-30-2021 12:04:33 PM Admin
EAHrdk9frenchfe2020
mindray
RT ADR
Dist 2.38 cm
Dist 0.65 cm
Dist 0.56 cm


IntraPet Imaging RBIILLC
drenning ,raven
Abd small I
C11-3s
08-30-2021 12:00:25 PM Admin
EAHrdk9frenchfe2020
mindray
Liver
LN



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