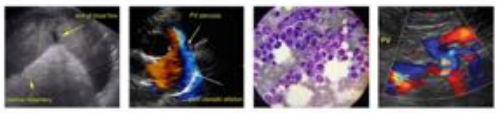
PAUS
Pet Animal Ultrasound Service
4paus.com 781-635-5677



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

PATIENT

Baki Jumes

SPECIES

Canine

BREED

Poodle Mix

SEX

Neutered Male

AGE

14 years

WEIGHT

13.5 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Norfolk County Veterinary Service

REFERRING VET

Emily McCabe, DVM

INVOICE

12388

DATE

3.9.23

PRESENTING CLINICAL SIGNS

History: Since last ultrasound in September, worsening liver enzymes and cholestatic values. Hypertension. Current meds: 1) Novolin N 5.5 units BID, 2) Fish oil 100mg SID, 3) Enalapril 2.5mg BID, 4) Ursodiol 63.5mg SID, 5) Selegiline, 6) Entyce. Previous AUS 9/1/22, R. McKenzie Daniel): Chronic hepatopathy, GB debris, moderate chronic renal changes, splenic hyperechoic foci.

Abnormal PE/Chem/CBC/UA Results: ALP 1434, ALT 573, GGT 1180, BUN 78, ALB 4.7, CHOL 470 (full CBC and chem NOT performed).

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 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 1-2 cm, are normal.

The prostate is normal in size (1.01 cm in width) with slightly irregular peripheral contours. A few hyperechoic foci are observed within the gland. The parenchyma is otherwise homogenous. The prostatic urethra is not overtly dilated.

The left kidney is normal in size (5.33 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is moderate loss of corticomedullary distinction. Numerous pinpoint hyperechoic foci are observed throughout the cortex. A few cortical cysts are also seen. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

The right kidney is normal in size (5.22 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is moderate loss of corticomedullary distinction. Numerous pinpoint hyperechoic foci are observed throughout the cortex. A few cortical cysts are also seen. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis.

Adrenal Glands

The left adrenal gland is normal in size (0.50 cm at cranial pole) (0.50 cm at caudal pole) with a normal shape and smooth peripheral contours. Several pinpoint hyperechoic foci are observed throughout the organ. These foci are likely a benign incidental finding. The remaining glandular echogenicity and detail are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

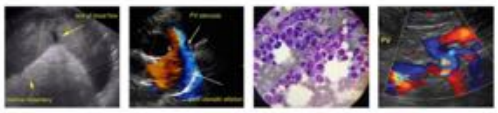
The right adrenal gland is in normal size (0.74 cm at cranial pole) (0.50 cm at caudal pole) with a normal shape and smooth peripheral contours. A few pinpoint hyperechoic foci are observed throughout the organ. These foci are likely a benign incidental finding. The remaining glandular echogenicity and detail are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is subjectively normal in size (1.19 cm in width at the level of the hilus) with a focal swelling at the medial aspect. There is appropriate echogenicity and echotexture. A 1.52 x 0.97 cm hypoechoic nodule is observed at the medial aspect, near the hilus. The lesion causes mild capsular expansion. A 0.66 cm hyperechoic nodule is also observed at the hilus. Numerous pinpoint to short linear hyperechoic foci are observed throughout the organ. Splenic vasculature is normal.

Liver

The liver is subjectively enlarged with swollen, slightly irregular peripheral contours. The parenchyma is isoechoic relative to the spleen and subtly heterogenous in appearance. An approximately 6.30 cm irregular heterogenous mass is observed at approximately mid-liver. The lesion causes capsular



PATIENT

Baki Jumes

SPECIES

Canine

BREED

Poodle Mix

SEX

Neutered Male

AGE

14 years

WEIGHT

13.5 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Norfolk County Veterinary Service

REFERRING VET

Emily McCabe, DVM

INVOICE

12388

DATE

3.9.23

expansion. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder is distended. The wall is normal in thickness. A large amount of aggregated, echogenic non-dependent sludge is observed within the lumen. The cystic and common bile ducts are normal.

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly distended with 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 ileocecocolic junction and colonic wall are normal. There is no evidence of an obstructive pattern.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic 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

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

ULTRASONOGRAPHIC FINDINGS

Primary Findings

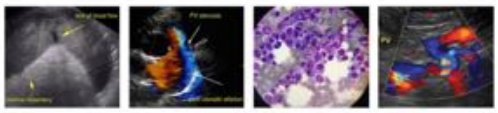
- Large hepatic mass, mid-liver. The mass is more defined and slightly larger compared to the previous sonogram. Neoplasia (i.e., adenoma, adenocarcinoma, round cell tumor) is considered likely. However, a benign process (i.e., regenerative nodular hyperplasia) cannot be completely excluded. The diffuse hepatic parenchymal changes are most consistent with a benign process (i.e., vacuolar hepatopathy and/or regenerative nodular hyperplasia). However, inflammatory disease, hepatotoxicosis (i.e., copper), or other hepatopathies are also considerations.
- The gall bladder changes are consistent with an emerging mucocele.
- The hypoechoic splenic nodule could be consistent with a benign focus of lymphoid hyperplasia, extramedullary hematopoiesis, or similar. Alternatively, an emerging tumor is possible.

Secondary Findings

- Splenic dystrophic mineralization. This is a benign incidental finding often seen with endocrinopathies (i.e., diabetes mellites).
- Bilateral degenerative renal changes with dystrophic mineralization
- The hyperechoic foci within the prostatic and adrenal parenchyma likely represents dystrophic mineralization due to the same process seen in the patient's other organs although other causes (i.e., early neoplasia) cannot be excluded.
- Minor age-related pancreatic remodeling

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess for pulmonary metastases.



PATIENT

Baki Jumes

SPECIES

Canine

BREED

Poodle Mix

SEX

Neutered Male

AGE

14 years

WEIGHT

13.5 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Norfolk County Veterinary Service

REFERRING VET

Emily McCabe, DVM

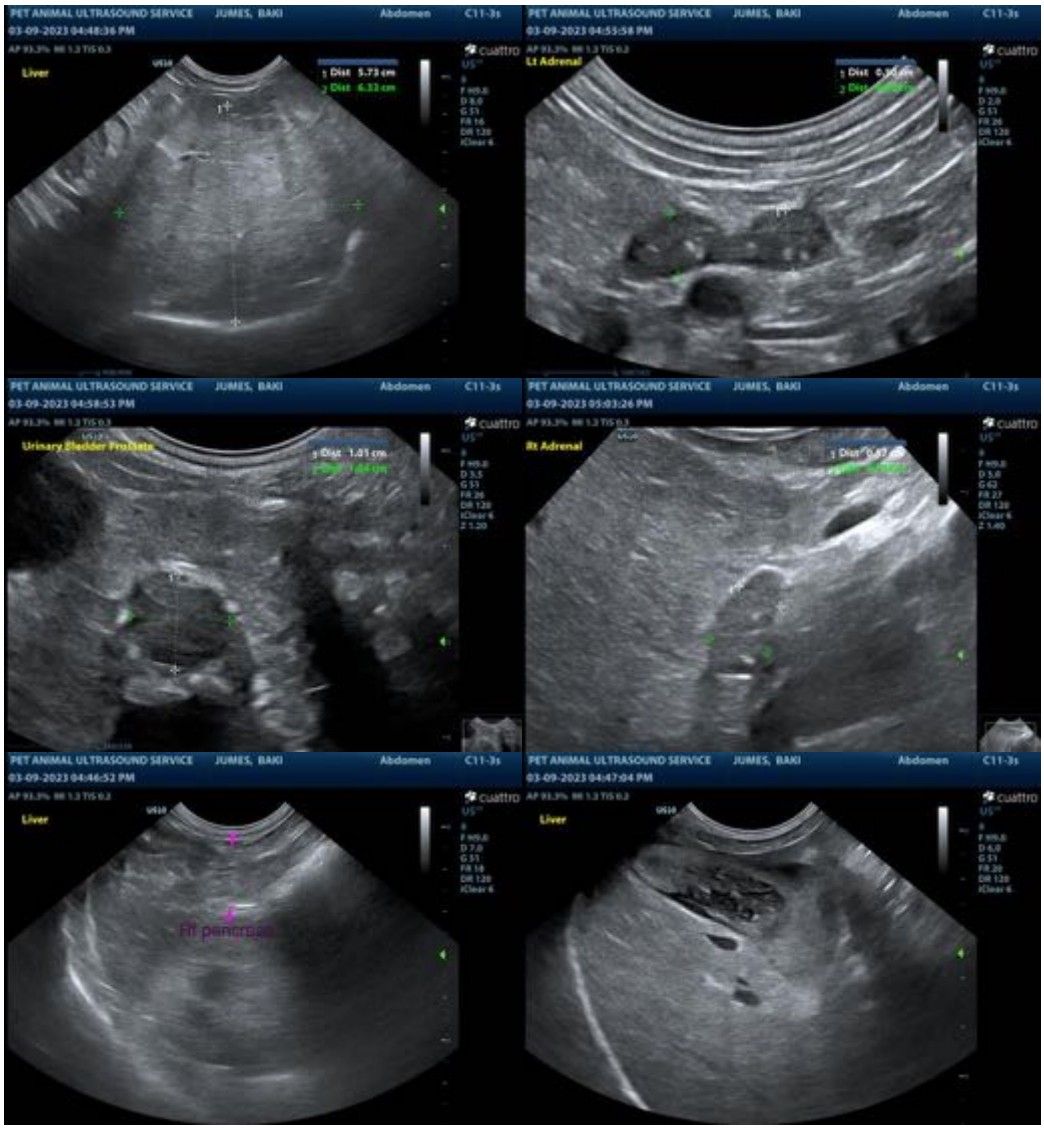
INVOICE

12388

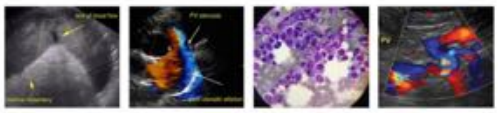
DATE

3.9.23

- Consider a fine-needle aspirate of the hepatic mass if clotting parameters are normal. A 25-gauge needle should be used. If the cytology results are inconclusive, excisional biopsy or debulking of the hepatic mass with submission for histopathology can be considered. An abdominal CT scan would be useful in presurgical planning.
- Regarding the splenic nodule, consider a fine-needle aspirate. Alternatively, if surgery is pursued, an intraoperative aspirate or splenectomy (with submission for histopathology) can be considered at the time of surgery.



PAUS
Pet Animal Ultrasound Service
4paus.com 781-635-5677



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

PATIENT

Baki Jumes

SPECIES

Canine

BREED

Poodle Mix

SEX

Neutered Male

AGE

14 years

WEIGHT

13.5 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Pamela Harrigan, RDCS

HOSPITAL NAME

Norfolk County Veterinary Service

REFERRING VET

Emily McCabe, DVM

INVOICE

12388

DATE

3.9.23

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