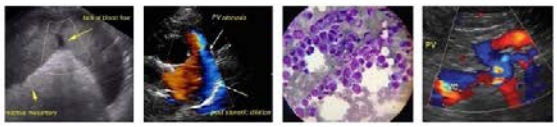
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Nukka Maio

SPECIES

Canine

BREED

Samoyed

SEX

Spayed Female

AGE

13 Years

WEIGHT

16.9 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

BPH Stoney Creek

REFERRING VET

Dr. Mellish

INVOICE

38457

DATE

6/7/22

PRESENTING CLINICAL SIGNS

Chronic weight loss and looks very underconditioned. aventi liver, clavaseptin (waiting on ursodiol) Abnormal PE/Chem/CBC/UA Results: ALT 1797 (after dilution) ALKP unreadable Mild anemia Slight elevation in GLOB

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is mildly to moderately distended with anechoic contents. Apical urinary bladder wall is diffusely thick (0.55 cm). Mucosa is hyperechoic and irregular. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface.

The right kidney is normal in size (6.11 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

The left kidney is normal in size (5.27 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

The left adrenal gland is enlarged in size, measuring 2.12 cm long x 1.0 cm at the cranial pole and 0.50 cm at the caudal pole. Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The right adrenal gland is enlarged in size, measuring 1.9 cm long x 1.1 cm at the cranial pole and 0.69 cm at the caudal pole. Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

The spleen is subjectively normal in size with a slightly scalloped, irregular contour. Parenchyma contains multiple poorly defined, hypoechoic nodules of varying sizes, as well as intermittent hyperechoic nodules and one apparent target lesion near the head of the spleen that measures 1.5 cm in diameter. Splenic vasculature appears normal.

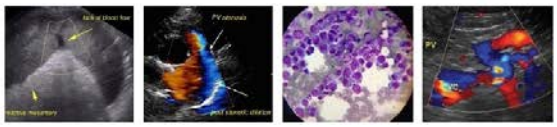
Liver

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. The left caudal liver has the normal curvilinear architecture completely disrupted by the presence of a 6-7 cm x 11-12 cm solid, homogeneous, hyperechoic mass. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is mildly distended with very echogenic reverberation artifact from intraluminal gas . There is no evidence of obstruction, foreign material or infiltrative disease; however, complete visualization of far wall is partially inhibited by gas. Pyloric outflow tract appears patent. The stomach is difficult to examine due to the large liver mass obscuring full visibility of the cranial abdomen.



PATIENT

Nukka Maio

SPECIES

Canine

BREED

Samoyed

SEX

Spayed Female

AGE

13 Years

WEIGHT

16.9 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

BPH Stoney Creek

REFERRING VET

Dr. Mellish

INVOICE

38457

DATE

6/7/22

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

PRIMARY FINDINGS

- Liver mass – most consistent with infiltrative neoplasia such as hepatocellular carcinoma versus sarcoma versus other. Given the concurrent splenic changes, round cell neoplasia is also possible, but considered less likely.
- Nodular spleen – Differentials include both benign lesions such as hematomas, nodular hyperplasia, extramedullary hematopoiesis, etc. combined with hyperechoic myelolipomas. However, infiltrative neoplasia can mimic benign lesions and cannot be ruled out, especially given the suspicion of a target lesion noted.

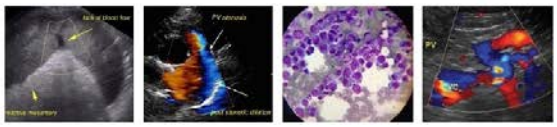
SECONDARY FINDINGS

- Chronic Cystitis – Urinary bladder wall changes are most consistent with chronic cystitis. Infiltrative neoplasia cannot be ruled out but is considered less likely give the location and diffuse nature of the changes.
- Bilateral adrenomegaly – consistent with adrenal hyperplasia secondary to pituitary depending hyperadrenocorticism vs normal variant.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Recommendations include a fine needle aspirate of the liver and spleen, if patient's coagulation status is appropriate.
- 3-view thoracic radiographs for further evaluation for metastatic disease if not recently done.
- Urinalysis recommend if not recently evaluated with urine culture if indicated based on urinalysis results.
- The adrenomegaly is considered incidental and not related to this patient's reported clinical signs at this time. However, pending response to management of the liver mass, etc., future recommendations (depending on clinical signs) may include low-dose Dexamethasone suppression test to rule out hyperadrenocorticism.
- Ultimately, surgical laparotomy with excisional biopsy/removal of the liver mass is warranted if metastatic disease and/or round cell neoplasia are not diagnosed on splenic aspirates.

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



THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Nukka Maio

SPECIES

Canine

BREED

Samoyed

SEX

Spayed Female

AGE

13 Years

WEIGHT

16.9 kg

INTERPRETED BY

Beth Johnson, DVM DACVIM

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

BPH Stoney Creek

REFERRING VET

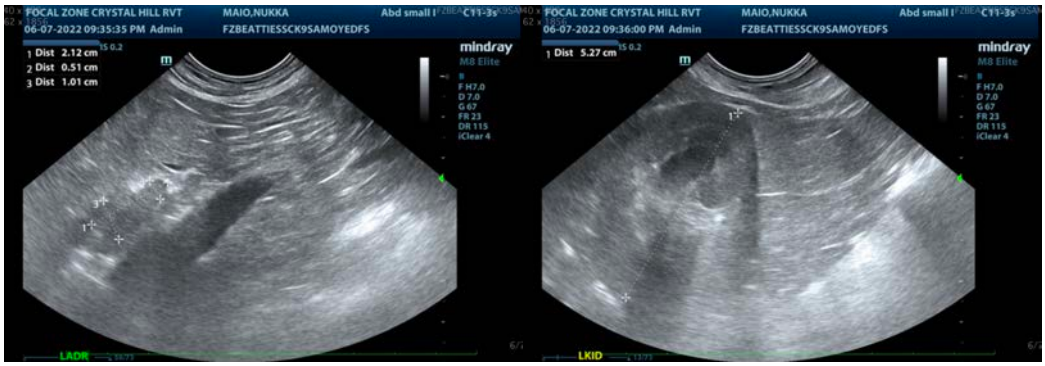
Dr. Mellish

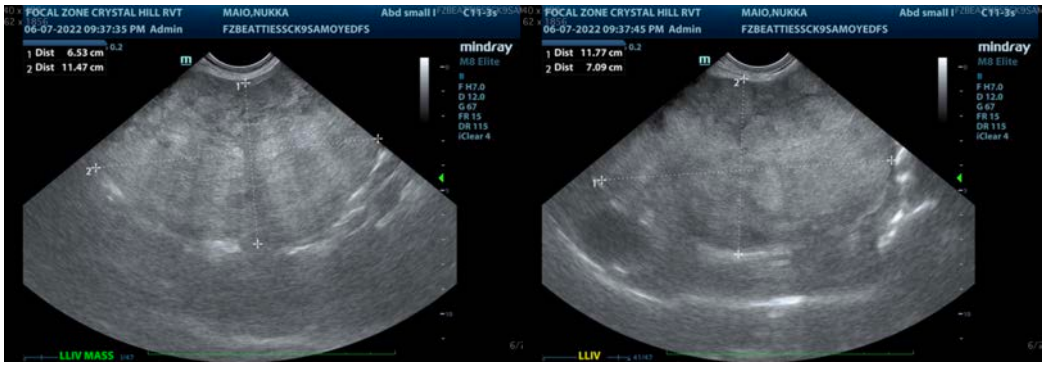
INVOICE

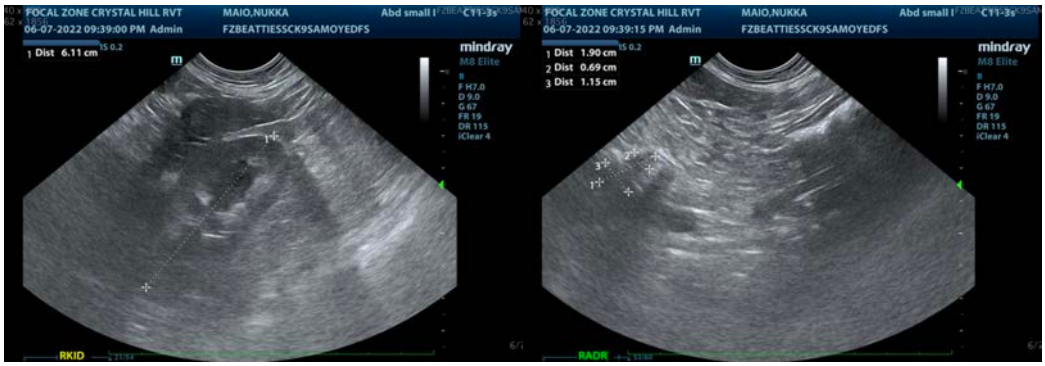
38457

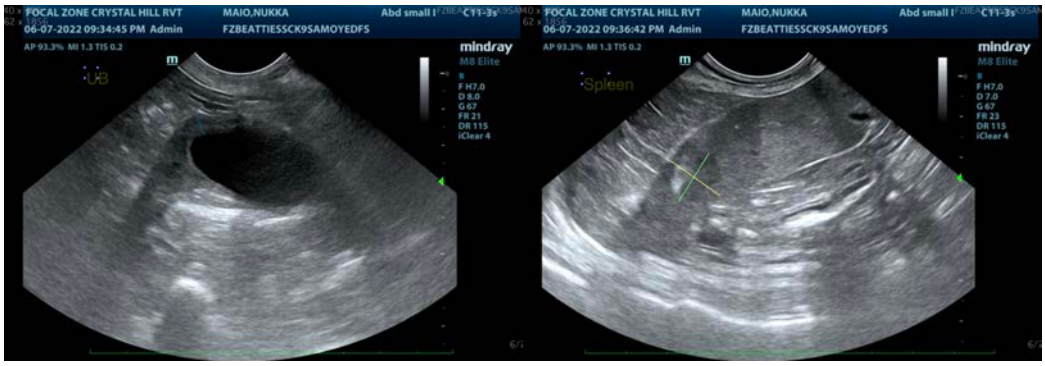
DATE

6/7/22

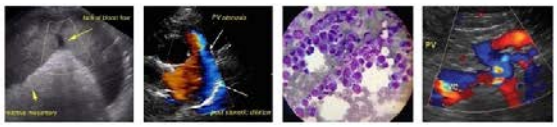








SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Nukka Maio

SPECIES

Canine

BREED

Samoyed

SEX

Spayed Female

AGE

13 Years

WEIGHT

16.9 kg

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

BPH Stoney Creek

REFERRING VET

Dr. Mellish

INVOICE

38457

DATE

6/7/22

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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com