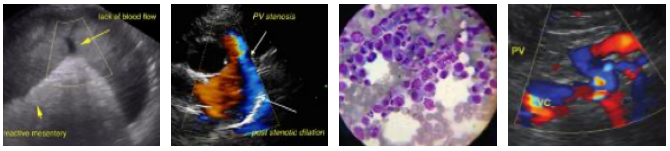
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Lila Anderson

SPECIES
Canine

BREED
Siberian Husky

SEX
Female, spayed

AGE
15 Yrs.

WEIGHT
36.8 lbs.

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

IMAGING PERFORMED BY
Jessica Miller

HOSPITAL NAME
Newton VH

REFERRING VET
Dr. Kim

INVOICE
13407

DATE
5/23/22

PRESENTING CLINICAL SIGNS

History: Possible peritoneal effusion seen on rads, presented with bloat 5/21 PM. Current meds: clavamox
Abnormal PE/Chem/CBC/UA Results: BUN 31.2, ALT 353, K 3.6, Neuts 14.1

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 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.

The left kidney is normal in size (5.74 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. Trace pyelectasia is present. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (6.23 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 normal size (0.57 cm at cranial pole) (0.51 cm at caudal pole) (2.57 cm in length); normal shape; homogenous parenchyma. A 1.14 x 0.36 cm ill-defined hyperechoic area is observed at the cranial pole. The glandular echogenicity and detail at the caudal pole are unremarkable. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.52 cm at cranial pole) (0.45 cm at caudal pole) (2.15 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.

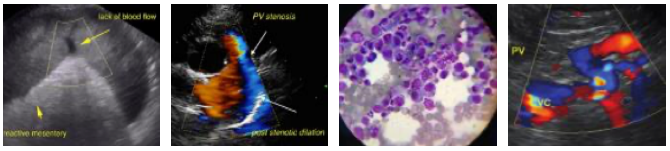
Spleen

The spleen is normal in size (1.53 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 and homogeneous in appearance. No focal lesions are observed. There is a subtle increase in portal markings. Vascular is of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is diffusely thickened (up to 0.24 cm) and hypoechoic, with a "double-walled" effect. A moderate amount of aggregated echogenic to mineralized, mostly gravity-dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Lila Anderson

SPECIES
Canine

BREED
Siberian Husky

SEX
Female, spayed

AGE
15 Yrs.

WEIGHT
36.8 lbs.

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

IMAGING PERFORMED BY
Jessica Miller

HOSPITAL NAME
Newton VH

REFERRING VET
Dr. Kim

INVOICE
13407

DATE
5/23/22

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. An approximately 2 cm segment of small intestine is thickened (up to 0.60 cm) with apparent retention of the normal layering pattern. The remaining small intestinal segments are normal in thickness with a normal layering pattern and appropriate mural detail. The ileocecal colic junction and colonic wall are normal. No obstructive disease is noted.

Pancreas

The base and limbs of the pancreas are visible with normal curvilinear peripheral contours. The parenchyma is slightly hypoechoic 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

Trace free fluid is observed. The abdominal lymph nodes are normal/not visible.

Other

A 0.85 x 0.65 cm hypoechoic nodule is observed in the cranial abdomen, adjacent to the stomach.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

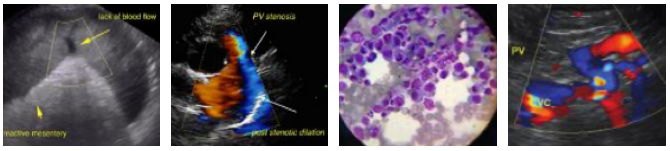
- The focal small intestinal wall thickening is most consistent with an inflammatory process. However, hypertrophy or emerging neoplasia cannot be completely excluded.
- The increase in hepatic portal markings is suggestive of an inflammatory process (i.e., cholangiohepatitis). Normal variation is also possible.
- The gallbladder wall changes could be consistent with cholecystitis, low oncotic pressure, autoimmune disease, anaphylaxis, other. Correlation with the patient's clinical history is recommended.

Secondary Findings:

- The pancreatic changes are suggestive of chronic age-related remodeling +/- mild chronic pancreatitis. Correlation with the patient's clinical history is recommended.
- Minor bilateral age-related renal changes with dystrophic mineralization.
- The parenchymal changes at the cranial pole of the left adrenal gland likely represent benign hyperplasia.
- The hypoechoic nodule in the cranial abdomen may represent a prominent lymph node, nodule within the mesentery or pancreas, other.

*An obvious cause for the patient's bloat is not identified in this study.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Lila Anderson

SPECIES

Canine

BREED

Siberian Husky

SEX

Female, spayed

AGE

15 Yrs.

WEIGHT

36.8 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Newton VH

REFERRING VET

Dr. Kim

INVOICE

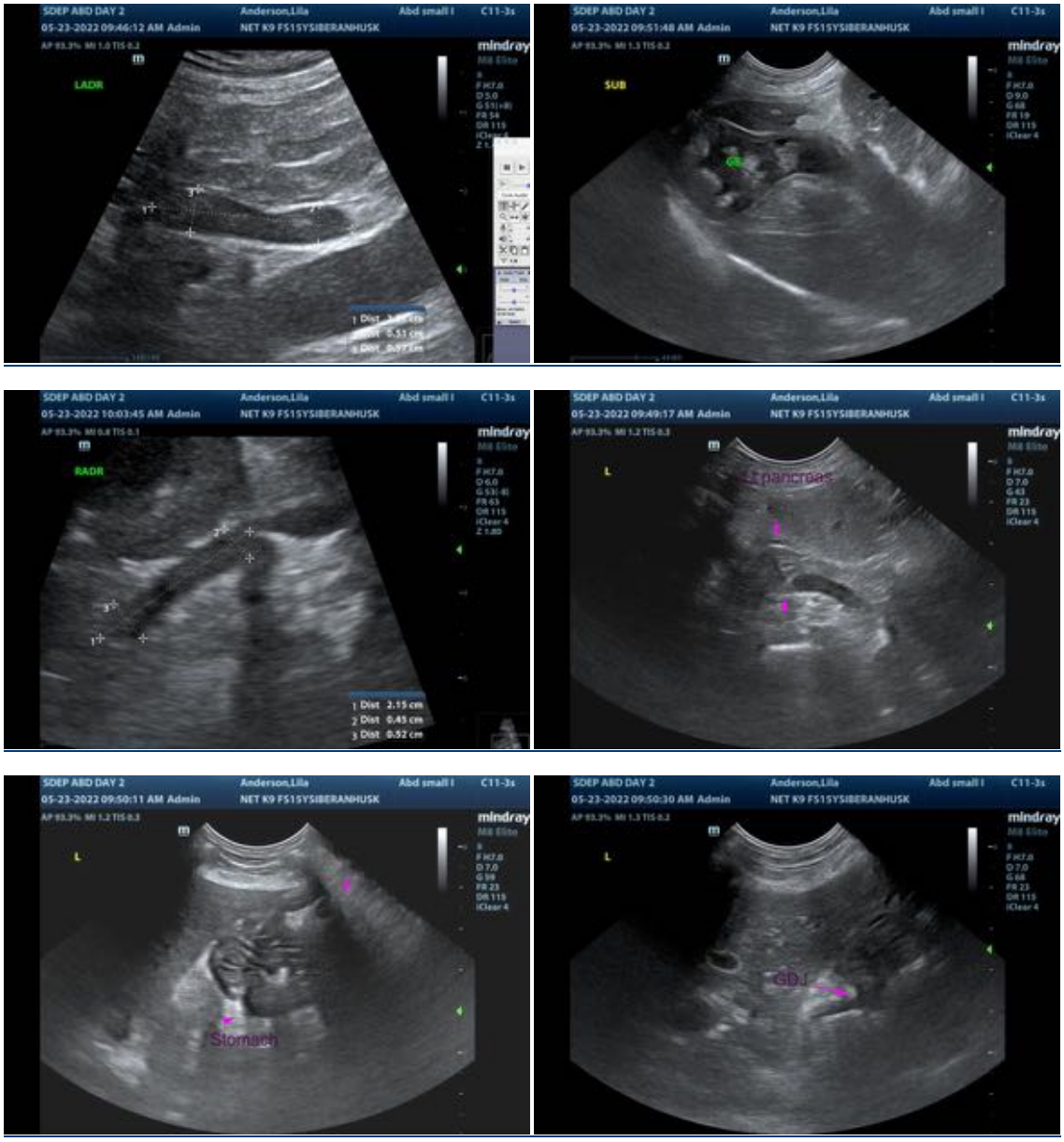
13407

DATE

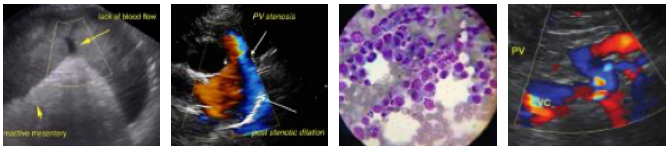
5/23/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If a conservative approach to the elevated ALT is desired, consider empirical treatment for cholecystitis/cholangiohepatitis (i.e., broad spectrum antibiotics, Denamarin). If the ALT does not improve within 5-7 days of initiating therapy, hepatic tissue sampling (i.e., surgical biopsy) may be warranted. If surgery is pursued, biopsies/removal of the cranial abdominal nodule along with gastrointestinal biopsies, with particular attention to thickened region, can be considered. A gastropexy should also be considered at the time of surgery. Aerobic and anaerobic bile cultures as well as acquisition of additional hepatic tissue samples for potential copper quantitation are also recommended. Thoracic radiographs should be performed prior to anesthesia. If surgery is not pursued at this time, consider a recheck ultrasound in 3-4 weeks to reassess the sonographic abnormalities.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Lila Anderson

SPECIES

Canine

BREED

Siberian Husky

SEX

Female, spayed

AGE

15 Yrs.

WEIGHT

36.8 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Newton VH

REFERRING VET

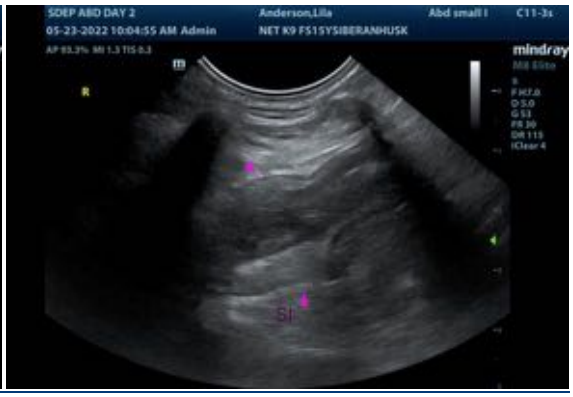
Dr. Kim

INVOICE

13407

DATE

5/23/22



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.

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

Andrea.nicastro@sonopath.com