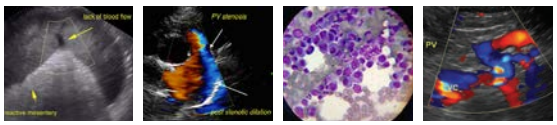
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

PATIENT

Felix Creighton

SPECIES

Feline

BREED

DLH

SEX

Neutered male

AGE

6 Years

WEIGHT

8.01 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Orchard View Vet Center

REFERRING VET

Dr. Rowland

INVOICE

37916

DATE

5/24/22

PRESENTING CLINICAL SIGNS

Hypercalcemia, diarrhea, malignancy & GI signs
Abnormal PE/Chem/CBC/UA Results: Creatinine 0.7 (0.9-2.3) Ca 14.4 (8.2-11.2) TCO2 24 (12-22) ALT 241 (27-158)

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with mild primarily suspended echogenic debris present. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or calculi. Echogenic debris of this type can be associated with small crystals, cellular debris and proteinaceous debris.

The left kidney has a normal shape and size (3.62 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.07 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.45 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.45 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

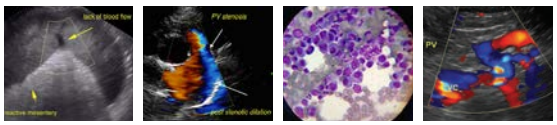
The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

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



ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

PATIENT

Felix Creighton

SPECIES

Feline

BREED

DLH

SEX

Neutered male

AGE

6 Years

WEIGHT

8.01 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Orchard View Vet Center

REFERRING VET

Dr. Rowland

INVOICE

37916

DATE

5/24/22

Gastrointestinal

The stomach is dilated with a large amount of fluid and irregular shadowing material most consistent with normal ingesta and gas. It measures at a normal thickness of <0.36cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layering is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with small to moderate fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measured 0.22 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

Other

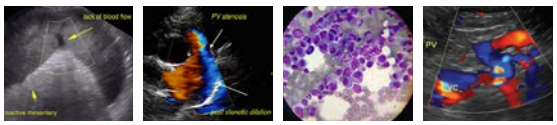
A brief view of the heart was submitted. No significant pericardial effusion was seen.

ULTRASONOGRAPHIC FINDINGS

- Mildly echogenic debris visualized within the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Large ingesta within the gastric lumen – Correlate with feedings history and abdominal radiographs. If adequately fasted then consider such differentials as delayed gastric emptying or a partial outflow tract obstruction (none visualized). Unfortunately, this material obscures full evaluation of the pyloric region.
- Mild fluid dilation of the small intestine – These changes are not consistent with a typical obstructive pattern, but there is a moderate amount of chyme visualized throughout the GI tract. This could be consistent with a lack of fasting, generalized ileus, or less likely obstructive material.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large amount of shadowing material/fluid visualized within the gastric lumen, the small intestine, and possibly even portions of the colon/ Correlate these findings with feeding history and abdominal radiographs, as visualization of the pylorus in some regions are obscured. This could be consistent with a recent meal, ileus, ingested foreign material, etc.



PATIENT

Felix Creighton

SPECIES

Feline

BREED

DLH

SEX

Neutered male

AGE

6 Years

WEIGHT

8.01 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Orchard View Vet Center

REFERRING VET

Dr. Rowland

INVOICE

37916

DATE

5/24/22

No focal lesions are visualized associated with the liver or gallbladder. A cause for the elevation in ALT reported is not identified. Consider a liver function test and fine needle aspirate of the liver, provided coagulation parameters are normal.

An elevated calcium is reported. This should be further investigated with an ionized calcium, PTH and PTHrP level to look for evidence of hyperparathyroidism, idiopathic hypercalcemia, etc. Additionally, 3-view thoracic radiographs should be performed to evaluate the cranial mediastinum for any evidence of mass effect, and a digital rectal exam should be performed to evaluate the anal gland lesion and sublumbar lymph nodes. Below is a list of differentials for hypercalcemia to consider, provided the ionized calcium is elevated. Keep in mind that many of these differentials are more likely in dogs, but the list can still be helpful in trying not to forget differentials.

Hypercalcemia differentials:

Hyperparathyroidism-

primary or nutritional secondary, Parathyroid,neoplasia/hyperplasia

Hypoadrenocorticism-addisons

Renal disease-

failure/Renal insufficiency, chronic kidney disease

Neoplasia-

Lymphoma, lymphosarcoma
Mammary adenocarcinoma
Multiple myeloma
Anal gland adenocarcinoma

Oral/nasal carcinomas

Hematopoietic neoplasia

Vitamin D excess or rodenticide

Osteolytic disease-

Bacterial osteomyelitis, Bone neoplasia, Hyper-osteodystrophy

Nutritional- (ingestion of…)

Calcium ingestion excessive

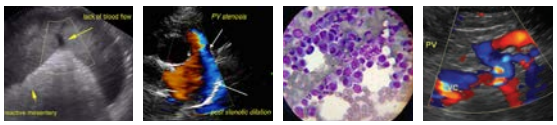
Limestone ingestion
Poisonous plants

Thiazides,Toxins,Trisetum flavescens, yellow oat grass
Vitamin A excessive

Lab error-

Iatrogenic with hemolysis

Hyperalbuminemia
Hyperlipidemia, lipemia



PATIENT

Felix Creighton

SPECIES

Feline

BREED

DLH

SEX

Neutered male

AGE

6 Years

WEIGHT

8.01 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Orchard View Vet Center

REFERRING VET

Dr. Rowland

INVOICE

37916

DATE

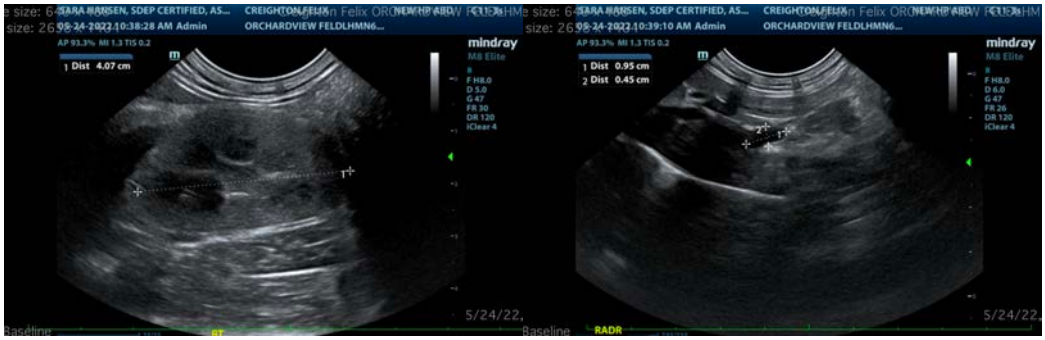
5/24/22

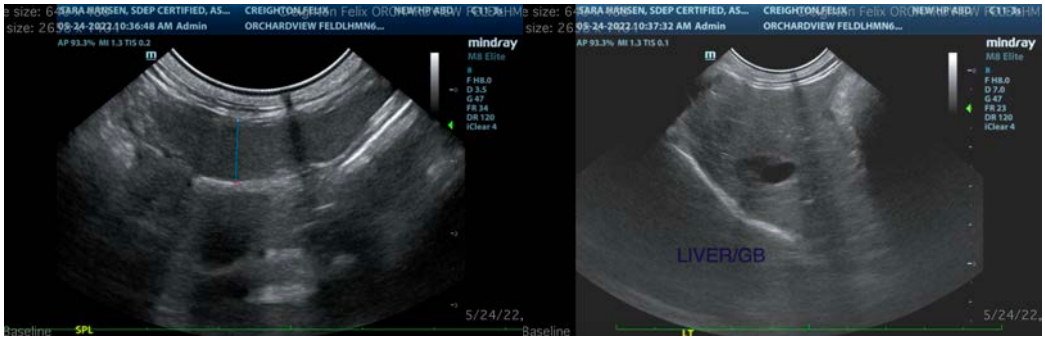
Dehydration
Detergent contamination of sample

Granulomatous disease-

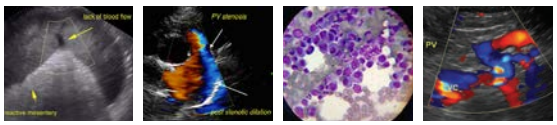
Blastomyces dermatitidis
Heterobilharzia americana
Histoplasma capsulatum

Idiopathic (primarily cats)





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



ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

PATIENT

Felix Creighton

SPECIES

Feline

BREED

DLH

SEX

Neutered male

AGE

6 Years

WEIGHT

8.01 Pounds

INTERPRETED BY

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Orchard View Vet Center

REFERRING VET

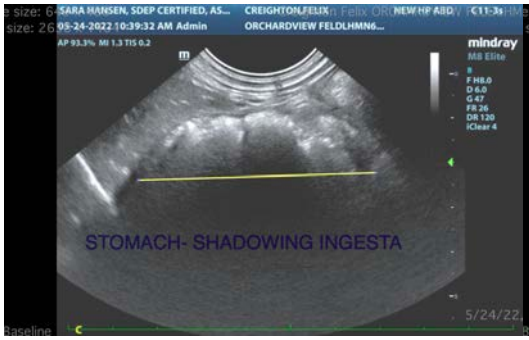
Dr. Rowland

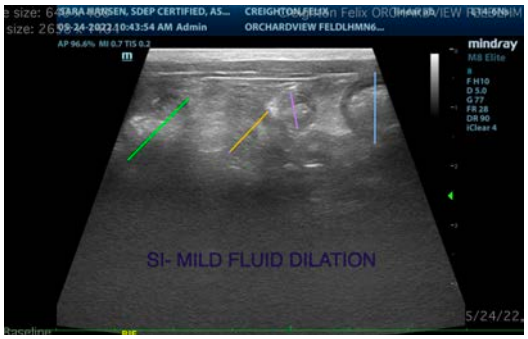
INVOICE

37916

DATE

5/24/22





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)

kathleen.sennello@sonopath.com