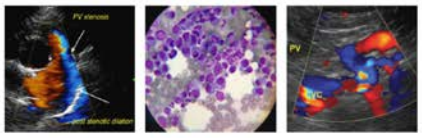
IMAGING PERFORMED BY
SVS Mobile Imaging KC 816-401-5010
svsimagingkc@gmail.com

SVS IMAGING



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

PATIENT

Ali Ortega

SPECIES

Canine

BREED

Boxer X

SEX

Spayed Female

AGE

17 Years

WEIGHT

48.8 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Runnells, RVT

HOSPITAL NAME

SVS Imaging KC

REFERRING VET

Dr. Kristine Mulloy

INVOICE

41498

DATE

9/21/22

PRESENTING CLINICAL SIGNS

Presented 8/24/22 for a mass and swelling on rear L leg (patient nonmobile for 2 years, takes galliprant and proin.) Has had the mass for over a year but it started growing quickly since Jan 2022. Owner said Johnson County Animal Clinic previously diagnosed with cancer. We added gabapentin, carprofen and a round of cephalexin and neopredef powder for the ulcerated skin on masses.

Abnormal PE/Chem/CBC/UA Results: -Large mass on lateral L hip roughly baseball size, ulcerated, nonhaired, SQ layer, moveable, malodorous, green discharge. - Cluster of smaller masses on mid L ventrum ranging in size from dime to dollar coin size. Cytology of mass = Mast cell neoplasia. Oncologist recommended abd u/s and thoracic rads before surgery to remove masses.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with mildly echogenic urine. The Bladder wall is mildly diffusely thickened at 0.39 cm with an irregular mucosa. The area of the trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear free of any masses or calculi. Findings are most consistent with cystitis or lack of urine distention.

The left kidney is normal in size (7.55 cm) but irregular in shape (likely due to previous infarct). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal 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 (7.36 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

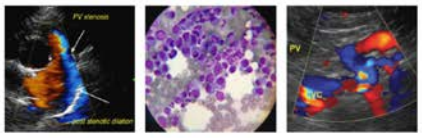
The left adrenal gland is large and irregular, measuring approximately 0.48 cm at the cranial pole and 0.60 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is atypical in appearance in that there is an oblong mass effect caudal to the area of the left adrenal gland measuring 1.36 cm x 3.79 cm, which I suspect is an extension off the caudal pole of the left adrenal gland. This lesion impinges on the vasculature and there is concern for possible invasion, but there is no distinct invasion visualized. This lesion could also represent an enlarged lymph node in the region, but this seems less likely.

The right adrenal gland is normal in size measuring 0.62 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 large and irregular in shape. The spleen echotexture is heterogenous and mottled. The blood flow through the hilus and splenic parenchyma appears normal. There are numerous large irregular hyperechoic lesions throughout the spleen. Many of these could be consistent with benign myelolipomas, but some of these lesions appear associated with some abnormal “bulging” areas of spleen, which appear to have a somewhat motheaten appearance.

IMAGING PERFORMED BY
SVS Mobile Imaging KC 816-401-5010
svsimagingkc@gmail.com



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

PATIENT

Ali Ortega

SPECIES

Canine

BREED

Boxer X

SEX

Spayed Female

AGE

17 Years

WEIGHT

48.8 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Runnells, RVT

HOSPITAL NAME

SVS Imaging KC

REFERRING VET

Dr. Kristine Mulloy

INVOICE

41498

DATE

9/21/22

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is diffusely heterogenous in echotexture with subtle, indistinct focal mottling. 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 mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

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 <0.7cm 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 minimal 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 measures 0.36 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. There are large hypoechoic lymph nodes visualized near the area of the aortic trifurcation, measuring at 1.3 cm and 1.4 cm in width.

Other

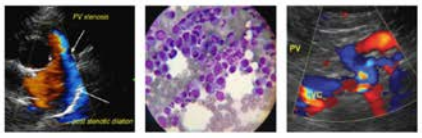
A large mixed echogenic mass effect is visualized measuring 4.37 cm x 6.22 cm, located superficially (not within the abdomen) on the left flank.

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

ULTRASONOGRAPHIC FINDINGS

- Mildly echogenic urine in the urinary bladder with a slightly thickened/irregular urinary bladder wall – The bladder mucosal changes could be consistent with cystitis or artifactual due to lack of adequate luminal distension. Bladder neoplasia cannot be ruled out but is considered unlikely in this patient.
- Mass effect possibly arising from the caudal pole of the left adrenal gland – This likely represents either a lymph node or more likely a left adrenal mass lesion – Left/right adrenomegaly could be consistent with neoplasia (e.g., adenoma, carcinoma, pheochromocytoma), hyperplasia, inflammation, other.

IMAGING PERFORMED BY
SVS Mobile Imaging KC 816-401-5010
svsimagingkc@gmail.com



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

PATIENT

Ali Ortega

SPECIES

Canine

BREED

Boxer X

SEX

Spayed Female

AGE

17 Years

WEIGHT

48.8 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Runnells, RVT

HOSPITAL NAME

SVS Imaging KC

REFERRING VET

Dr. Kristine Mulloy

INVOICE

41498

DATE

9/21/22

- Decreased corticomedullary distinction in both kidneys – The bilateral renal findings are consistent with age-related change.
- Large, irregular, mottled spleen with focal hyperechoic lesions and some irregular motheaten areas – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis. Many of the hyperechoic foci are likely consistent with benign myelolipomas, but the bulging motheaten areas are of concern.
- Heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Large shadowing material within the gastric lumen – Correlate with the feeding history and abdominal radiographs. If the patient was adequately fasted consider such differentials as delayed gastric emptying, a partial outflow tract obstruction (none seen) or ingested foreign material.
- Caudal iliac lymphadenopathy – The moderate mesenteric lymphadenopathy is most concerning for a neoplastic process, although you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease(tick born disease-such as bartonella, fungal infections, FIP (cats)) etc. A fine needle aspirate with cytology is recommended for further evaluation.
- Large, mixed echogenic subcutaneous mass lesion – Recommend fine needle aspirate.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

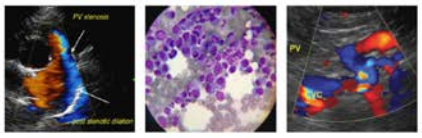
Some of the changes observed in the spleen, liver, and iliac lymph nodes are concerning for possible metastatic change, although, in a 17 year old dog, some of these could be benign age related changes, so sampling is necessary. Additionally, the iliac lymph node could be reactive secondary to the inflammation and infection caused by the mass lesion. Recommend a fine needle aspirate of the liver and spleen and possibly a lymph node and the mass on the flank.

Additionally, there is a mass lesion caudal to the left kidney, which I'm concerned is an extension off of the caudal pole of the left adrenal gland. Alternately, this could be a lymph node, but this seems less likely. This could represent a benign or neoplastic lesion and could be active or non-secretory. Consider there are other issues going on, I would recommend a blood pressure evaluation and measuring catecholamine levels if blood pressure is elevated, looking for a pheochromocytoma. Otherwise, your options are to consider a contrast CT scan to get a better evaluation for possible vascular invasion, etc. and/or adrenal function testing, but I suspect interpreting these results could be challenging, given the concurrent disease going on.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

IMAGING PERFORMED BY
SVS Mobile Imaging KC 816 - 401 - 5010
svsimagingkc@gmail.com

SVS IMAGING



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

PATIENT

Ali Ortega

SPECIES

Canine

BREED

Boxer X

SEX

Spayed Female

AGE

17 Years

WEIGHT

48.8 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Runnells, RVT

HOSPITAL NAME

SVS Imaging KC

REFERRING VET

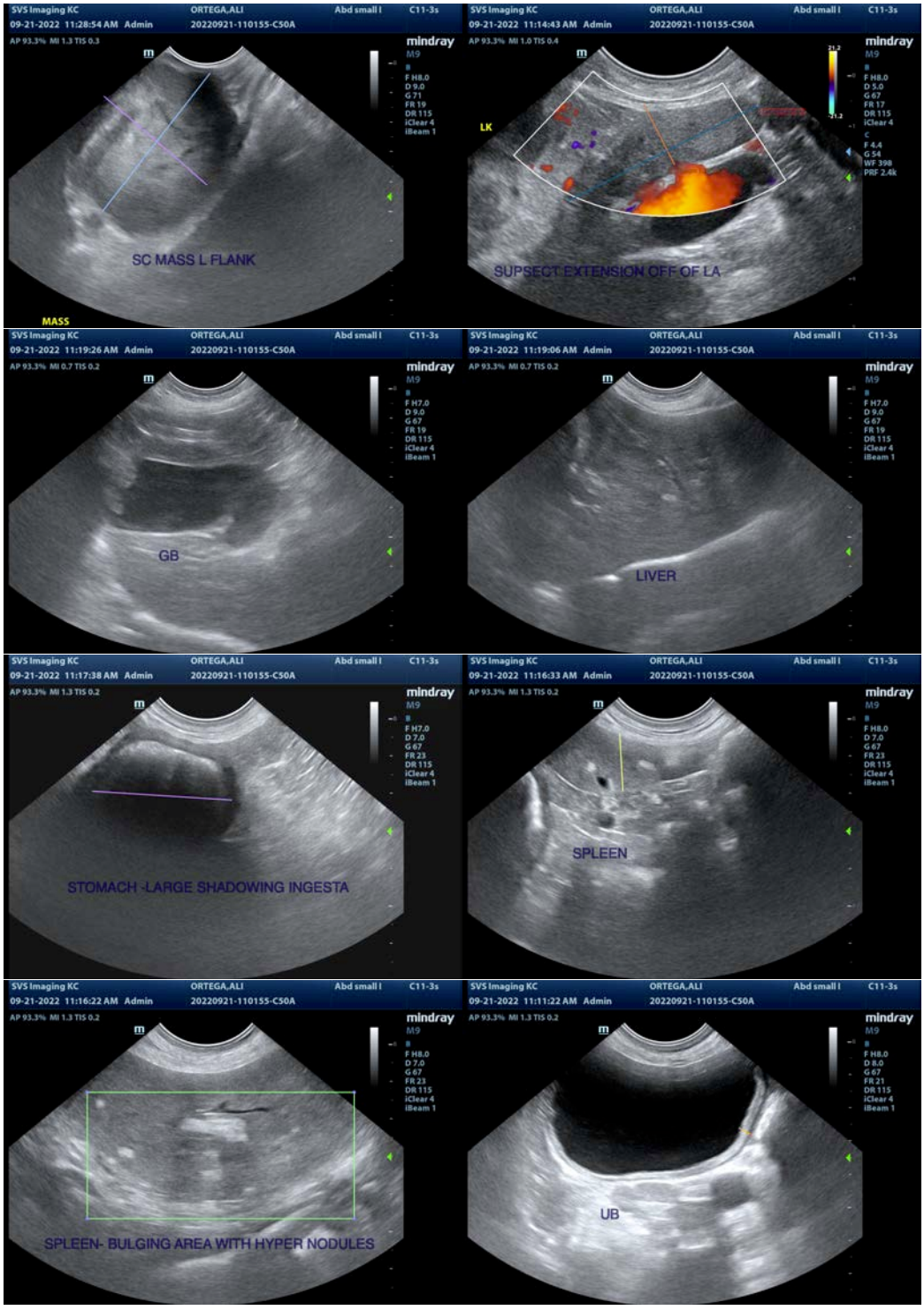
Dr. Kristine Mulloy

INVOICE

41498

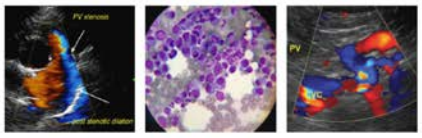
DATE

9/21/22



IMAGING PERFORMED BY
SVS Mobile Imaging KC 816 - 401 - 5010
svsimagingkc@gmail.com

SVS IMAGING



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

PATIENT

Ali Ortega

SPECIES

Canine

BREED

Boxer X

SEX

Spayed Female

AGE

17 Years

WEIGHT

48.8 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Rachel Runnells, RVT

HOSPITAL NAME

SVS Imaging KC

REFERRING VET

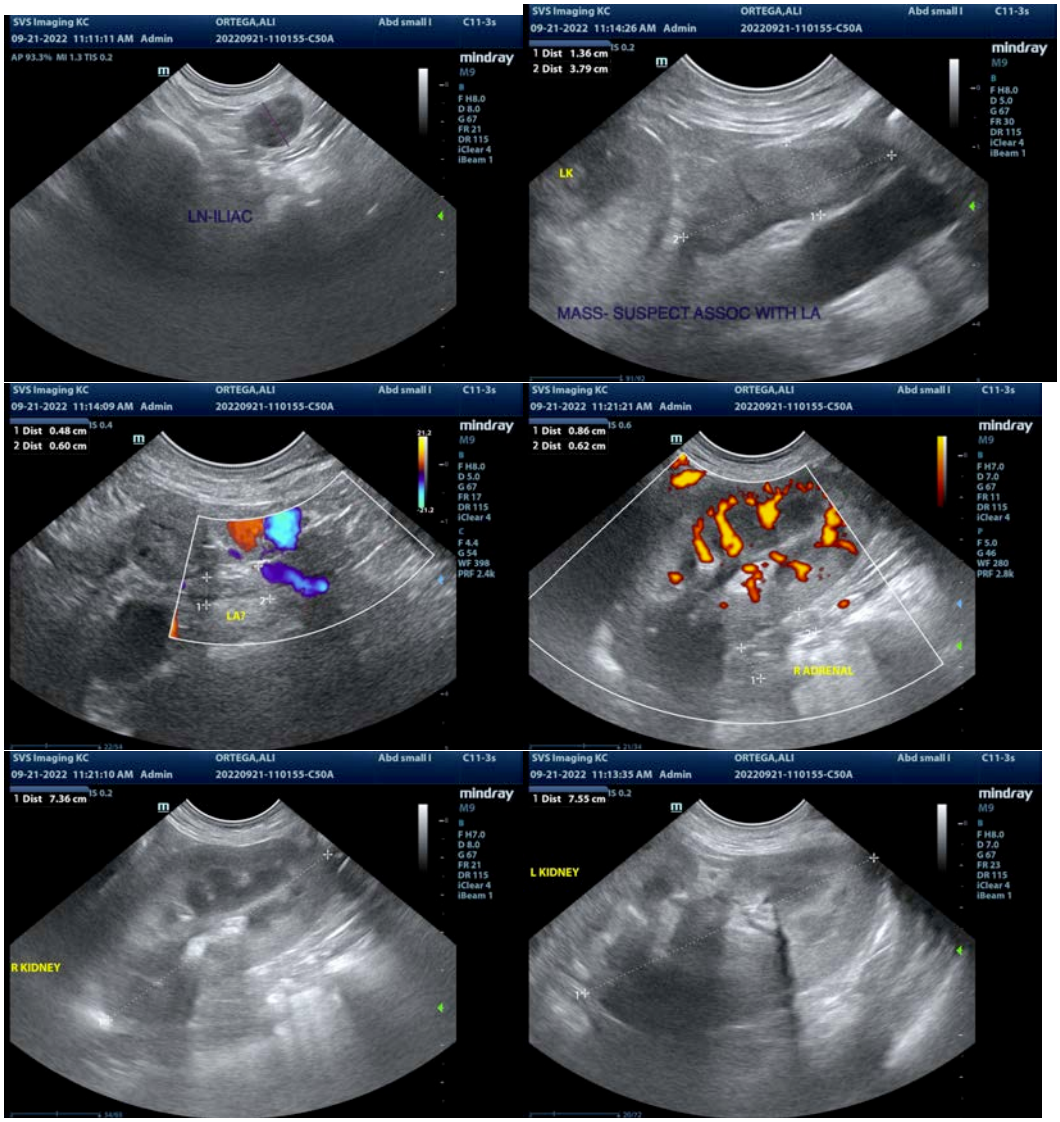
Dr. Kristine Mulloy

INVOICE

41498

DATE

9/21/22



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