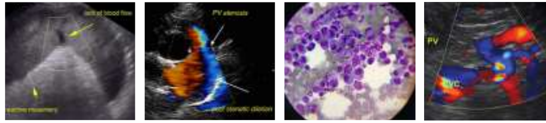
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



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

PATIENT

Junebug Fairbanks

SPECIES

Canine

BREED

Mixed Breed

SEX

FS

AGE

11 years

WEIGHT

67.5 lbs.

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Jenna Walsh, CVT

HOSPITAL NAME

VCA Salem AH

REFERRING VET

Dr. Hovenden

INVOICE

12956

DATE

1/4/22

PRESENTING CLINICAL SIGNS

Bloated abdomen, rear limb mobility concerns - The owner reports that Junebug's abdomen has been becoming increasing distended over the last month. She has been drinking water excessively for the last few days but her urinations have been normal. She is having weakness in her rear legs and is now having hard time with stairs.
Abnormal PE/Chem/CBC/UA Results: ABNORMAL Laboratory Findings Brief bladder ultrasound: large bladder, no stones or masses. Collected urine sample via cystocentesis. UA (in-house): USG 1.004, pH 7, quiet sediment exam --> dilute urine sample but otherwise unremarkable CBC: WBC 11,900 with lymphopenia, PCV 47%, TS 7 g/dL Chemistry profile: ALP 1302, ALT 429, GLU 114 --> hepatic disease (r/o neoplasia, infectious, chronic cholangiohepatitis), stress hyperglycemia

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder was mildly distended in size containing anechoic urine yet subjective normal tone. No sediment or calculi was noted. The urethra exhibited normal structure and tone to a depth of 3.0 cm.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. Both kidneys exhibited mild nonuniform increased corticomedullary echogenicity and moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 8.2 cm in length. The right kidney measured 8.3 cm in length.

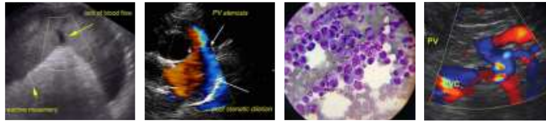
Adrenal Glands

The left adrenal gland was normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.83 cm width in the cranial pole and 0.79 cm width in the caudal pole.

Indistinct mildly echogenic nodular changes primarily in the area of the mid to cranial right adrenal gland were present yet maintained primarily symmetrical right adrenal capsule contour and no evidence of right adrenal parenchymal mineralization was noted. The right adrenal gland measured 1.3 cm width at the cranial pole and 1.8 cm width at the caudal pole. The indistinct nodule in the mid to cranial right adrenal gland measured 1.3 cm x 0.94 cm.

Spleen

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Multifocal, well-defined, symmetrical, echogenic nodules were present primarily in the medial parenchyma and around the hilus. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory or neoplastic changes were not



PATIENT

Junebug Fairbanks

SPECIES

Canine

BREED

Mixed Breed

SEX

FS

AGE

11 years

WEIGHT

67.5 lbs.

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Jenna Walsh, CVT

HOSPITAL NAME

VCA Salem AH

REFERRING VET

Dr. Hovenden

INVOICE

12956

DATE

1/4/22

noted. The echogenic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas.

Liver/ Gallbladder

The liver exhibited significant hepatomegaly with the ventrocaudal liver extending caudally past the level of the gastric axis. The hepatic parenchyma exhibited generalized mildly nonuniform increased echogenicity compared to the spleen and renal cortices. The echotexture of the liver parenchyma was uniform with a mild coarse echotexture. A solitary, subtly expansive, nonhomogeneous mass lesion was present in the ventrocaudal liver, measuring 6.4 cm in diameter. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with echogenic, nonmineralized, nondependent biliary sludge. The biliary sludge was non-organized with a hypoechoic to anechoic, irregular to interrupted rim visible between the nondependent sludge and inner wall. No signs of gallbladder or peripheral inflammation were noted. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

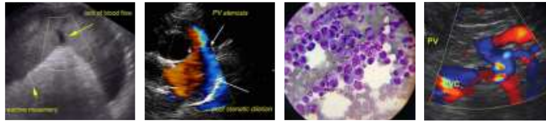
Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Moderate chronic renal changes
- Significant hepatomegaly exhibiting generalized mild nonuniform increased parenchyma echogenicity and a solitary nonhomogeneous ventrocaudal intraparenchymal mass lesion
- Early / partial gallbladder mucocele
- Indistinct right adrenal gland nodular parenchyma



PATIENT

Junebug Fairbanks

SPECIES

Canine

BREED

Mixed Breed

SEX

FS

AGE

11 years

WEIGHT

67.5 lbs.

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Jenna Walsh, CVT

HOSPITAL NAME

VCA Salem AH

REFERRING VET

Dr. Hovenden

INVOICE

12956

DATE

1/4/22

Secondary Findings

- Benign splenic nodules - myelolipomas, potential emerging mineralization sometimes associated with underlying endocrinopathy, previous infarction possible

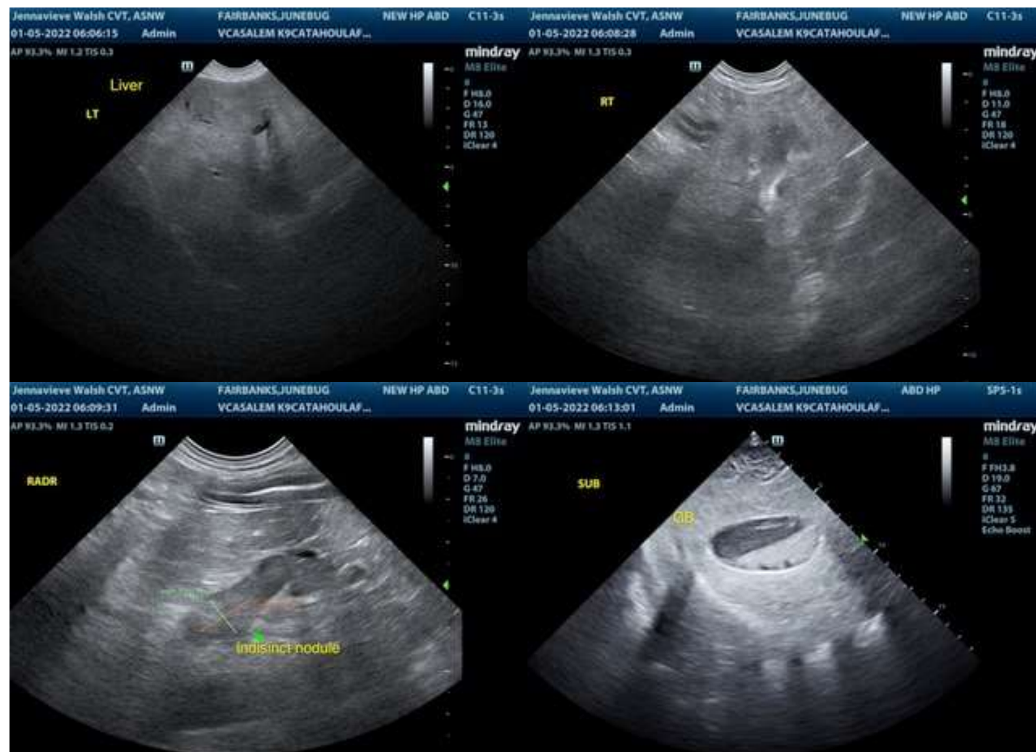
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered. even though urinalysis aside from decreased specific gravity was unremarkable.

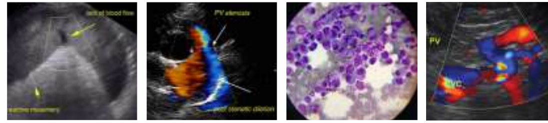
The Indistinct right adrenal nodular changes may indicate adenomatous change or secondary to hyperplasia. The potential for emerging right adrenal neoplasia Is considered a less likely differential diagnosis, yet cannot be definitively excluded. Sonographic monitoring of the right adrenal gland for evidence of progression is recommended. Full adrenal workup including LDDST is warranted, given the patient's clinical signs and sonographic findings.

Assuming normal clotting status, ultrasound-guided FNA of the mass lesion in the ventrocaudal liver using a 25-gauge needled is recommended for screening cytology and further clarification. Hepatosupportive medications with monitoring for evidence of increasing cholestasis associated with the gallbladder may prove beneficial.

The bloated appearance of the abdomen is most likely secondary to hepatomegaly.



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

Junebug Fairbanks

SPECIES

Canine

BREED

Mixed Breed

SEX

FS

AGE

11 years

WEIGHT

67.5 lbs.

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Jenna Walsh, CVT

HOSPITAL NAME

VCA Salem AH

REFERRING VET

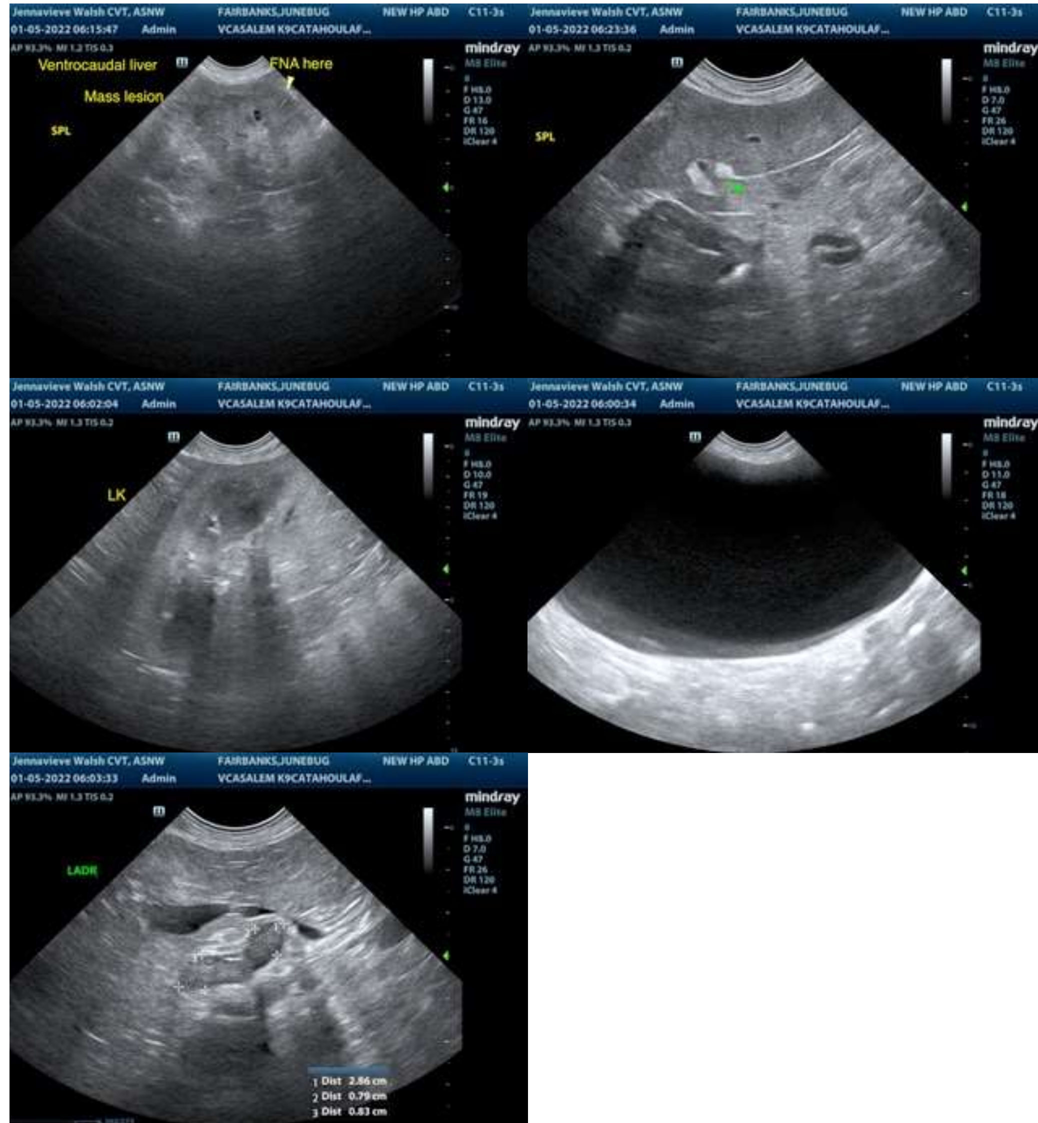
Dr. Hovenden

INVOICE

12956

DATE

1/4/22



The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com