



PATIENT PRESENTING CLINICAL SIGNS

Malik Adams Acute onset of lethargy/weakness and abdominal pain. Patient is anxious/fearful - abd palp was challenging, even with hydromorphone. aFAST - neg for FF, unable to visualize entire spleen, some changes in architecture possible, odd area in cranial abdomen not associated with liver or spleen which needs to be identified.

SPECIES

Canine Meds:hydromorphone, dexmedetomidine

BREED

Abnormal PE/Chem/CBC/UA Results: Please see attached rads and bloodwork. ALT 698 Chol 8.65 Amyl 1541 K 3.1 cPL abnormal

SEX

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

AGE

Urinary System

WEIGHT

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

INTERPRETED BY

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured - cm in length. The right kidney measured - cm in length.

WEIGHT

The area of the aortic trifurcation was free of pathology.

INTERPRETED BY

The area of the residual prostate appeared normal and free of pathology.

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

Adrenal Glands

IMAGING PERFORMED BY

The left adrenal gland was mildly enlarged with subtle asymmetrical contour and non-homogeneous parenchyma. No overt evidence of vascular invasion. The left adrenal gland measured 1.68 cm width at the caudal pole and 3.9 cm length. The right adrenal gland was indistinctly visualized. The right adrenal gland measured 0.68 cm width at the caudal pole and 2.1 cm length.

Crystal Hill

Spleen

HOSPITAL NAME

The spleen exhibited the potential for mild generalized enlargement with subtle parenchyma heterogeneity. A solitary mildly expansive hypoechoic to non-homogeneous nodule was present in the cranial spleen measuring 2.7 cm in diameter. The nodule appeared to subtly distort the associated capsule yet was without evidence of parenchymal escape. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis.

Hamilton Region
Emergency Clinic

REFERRING VET

Liver

Dr. Bourque

The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion.

INVOICE

12245ag

DATE

The gallbladder was non-distended in size with primarily anechoic luminal content and mild congealed dependent non-organized echogenic debris. No evidence of gallbladder or peripheral gallbladder inflammation was present. The cystic and common bile ducts were normal.

11/25/2022



PATIENT

Malik Adams

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.

SPECIES

Canine

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.

BREED

Heeler

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

SEX

MN

Pancreas

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum, likely consistent with age related changes and considered incidental. No signs of active inflammation or neoplasia.

AGE

12yr

Free Abdomen

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

WEIGHT

35kg

- Enlarged non-homogeneous left adrenal gland-adenomatous changes, benign hyperplasia, potential for neoplasia such as pheochromocytoma possible
- Hepatopathy-subjectively benign, potential for non-specific inflammatory hepatopathy given the ALT elevation and presence of gallbladder debris, vacuolar hepatopathy, infiltrative neoplasia less likely
- Mild gallbladder debris (non-mucocele)
- Mild age-related kidney changes
- Sonographically unremarkable pancreas-potential for low grade to chronic pancreatitis may present sonographically normal
- Mildly expansive non-specific splenic nodule-hyperplasia, hematopoiesis, hematoma, focal splenitis, granuloma, emerging nodular neoplasia are possible

INTERPRETED BY

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

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Hamilton Region
Emergency Clinic

REFERRING VET

Dr. Bourque

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

A screening BP is advised to assess for evidence of hypertension which may allude to emerging adrenal neoplastic criteria i.e. pheochromocytoma. Low grade pancreatitis may be considered if evidence of cranial abdominal or subxiphoid discomfort on palpation given the abnormal cPL. Assuming normal clotting status and using a 25g needle, a hepatic and splenic nodule FNA for screening cytology is warranted for further assessment. Hepatosupportive medications such as Denamarin or Vitamin E as well as Ursodiol due to its antioxidant and immunomodulatory effects within the liver would be warranted, although these medications may not result in decreased hepatic enzyme levels. Sonographic monitoring of the splenic nodule and the left adrenal gland with initial recheck in 3-4 weeks would be a more conservative approach.

INVOICE

12245ag

DATE

11/25/2022



PATIENT

Malik Adams

SPECIES

Canine

BREED

Heeler

SEX

MN

AGE

12yr

WEIGHT

35kg

INTERPRETED BY

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

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Hamilton Region
Emergency Clinic

REFERRING VET

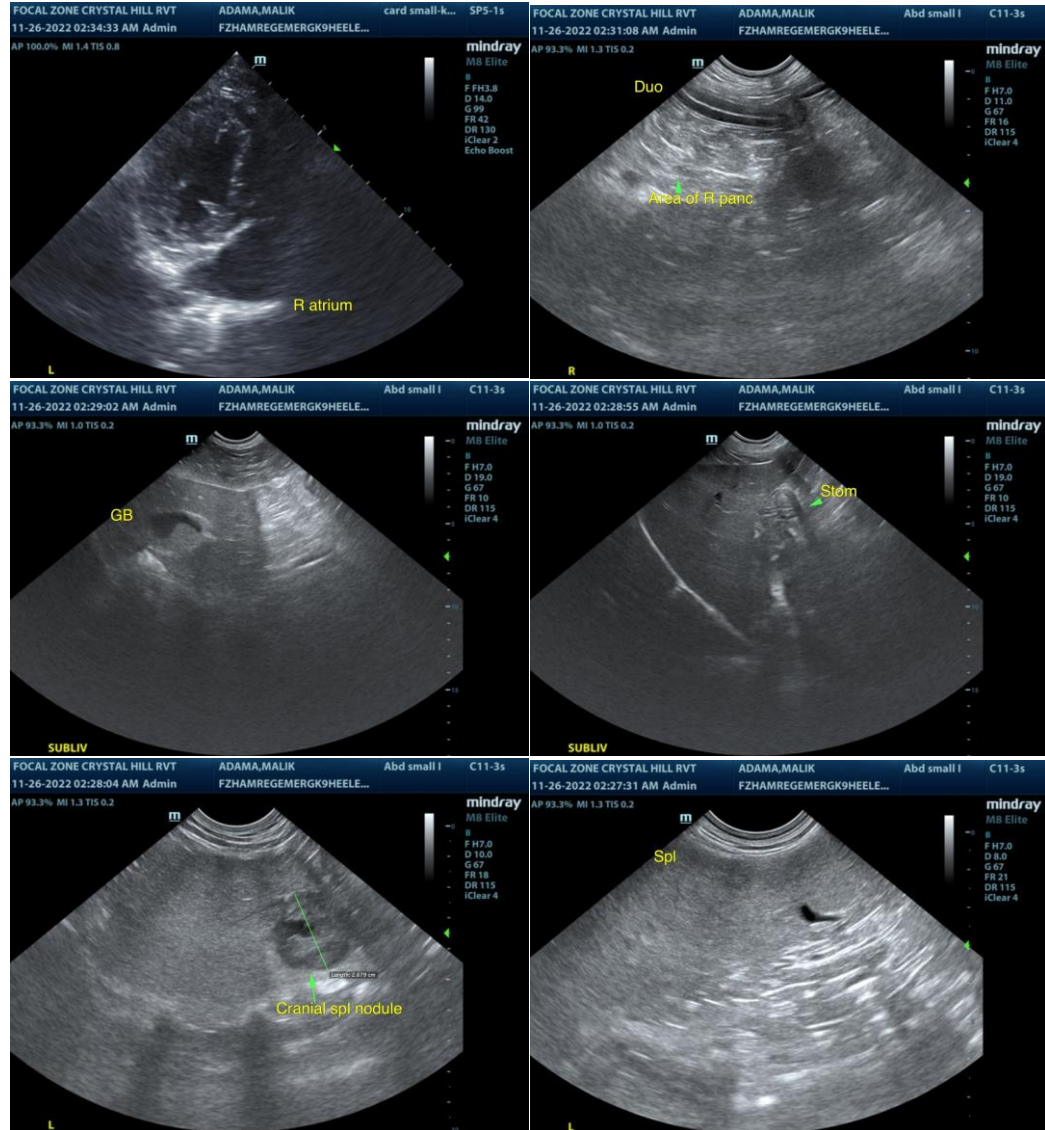
Dr. Bourque

INVOICE

12245ag

DATE

11/25/2022





PATIENT

Malik Adams

SPECIES

Canine

BREED

Heeler

SEX

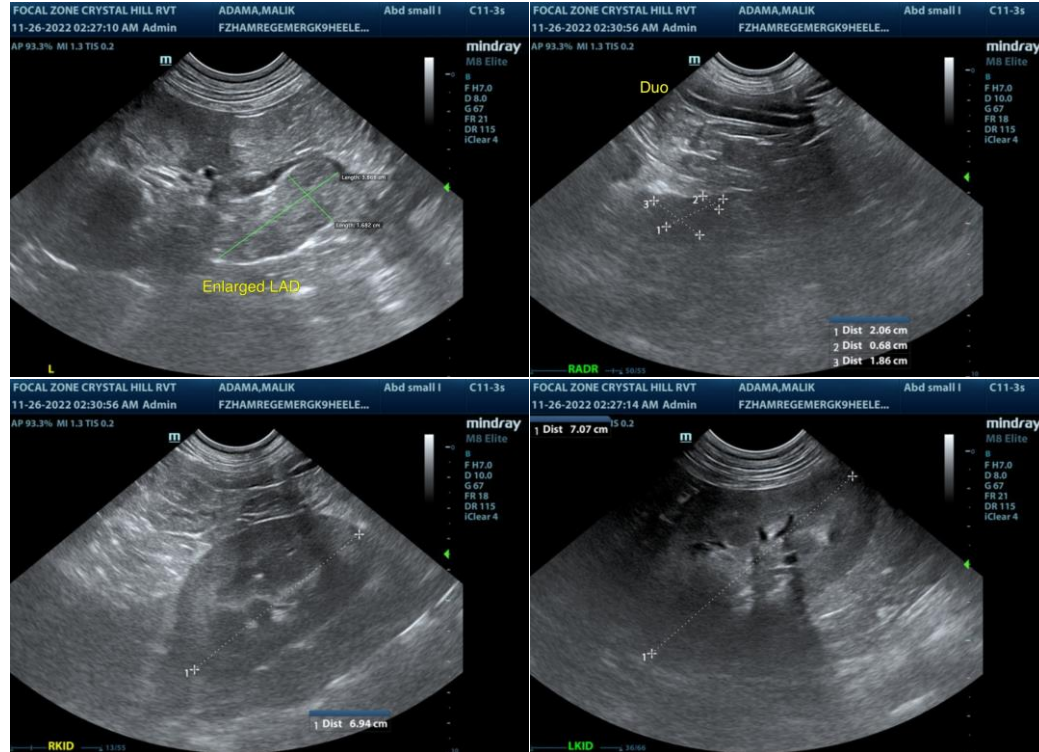
MN

AGE

12yr

WEIGHT

35kg



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.

INTERPRETED BY

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

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

IMAGING PERFORMED BY

Crystal Hill

HOSPITAL NAME

Hamilton Region
Emergency Clinic

REFERRING VET

Dr. Bourque

INVOICE

12245ag

DATE

11/25/2022