



## PATIENT

Arthur Koch

## SPECIES

Canine

## BREED

Daschund

## SEX

MN

## AGE

9 yr

## WEIGHT

37 lbs.

## INTERPRETED BY

R. McKenzie Daniel,  
DVM, DABVP

## IMAGING PERFORMED BY

Crystal Hill

## HOSPITAL NAME

Lakeshore Woods AH

## REFERRING VET

Dr. Masoud

## INVOICE

15470

## DATE

11/15/22

## PRESENTING CLINICAL SIGNS

Owner was told that Arthur has heart murmur and heart condition, and he is Vetmidin , after my exam, no murmurs detected, VD xray showed mild cardiomegaly, owner was advised with Echocardiogram for possible dental cleaning surgery, so what is the risk of anesthesia? Cerenia, Mirtazapine, sulcrate, clavamox. Abdomen scan due to changes to bloodwork.

Abnormal PE/Chem/CBC/UA Results: Elevated HGB, RBCs, HCT, Neutrophilis elevated ALP 5X

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 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 was noted.

No overt pathology associated with the residual prostate was noted.

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. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Pinpoint to focal medullary mineral was noted in both kidneys. The left kidney measured 5.9 cm in length. The right kidney measured 6.3 cm in length.

### Adrenal Glands

The left adrenal gland presented potential generalized mild asymmetrical enlargement exhibiting mild nonhomogeneous nonmineralized parenchyma. The subjective left adrenal gland measured 3.7 cm length x 1.4 cm width. Potential for a mass lesion in the area of the left adrenal gland or overlaying focal mesenteric lymph node cannot be definitively excluded. The possibility of vascular invasion associated with the left adrenomegaly cannot be excluded.

The right adrenal gland was indistinctly visualized owing to overlaying colonic gas and gastric Ingesta. The right adrenal gland subjectively measured 2.8 cm length x 0.60 cm width at the caudal pole.

### Spleen

The spleen exhibited subjective borderline to mild enlargement yet maintained symmetrical capsule contour and primarily finely textured homogeneous parenchyma. Focal to intermittent discrete hypoechoic nondisruptive splenic nodules were noted. An example measured 0.58 cm diameter.

### Liver/ Gallbladder

The liver exhibited subjective mild enlargement. 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



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congestion. The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.

**Gastrointestinal**

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The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained moderate ingesta exhibiting subtle progressive distal acoustic shadowing.

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The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. Segmental to generalized mild hyperechoic to nonshadowing ingesta / chyme was present.

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

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**Pancreas**

The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.

**AGE**

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**Free Abdomen**

No overt lymphadenopathy or peritoneal effusion was present.

**WEIGHT**

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**ULTRASONOGRAPHIC FINDINGS**

- Subjective left adrenomegaly, possible mass lesion area of left adrenal gland
- Mild chronic renal changes
- Hepatopathy - subjectively benign, suggestive of vacuolar hepatopathy pattern
- Nonspecific yet likely benign focal to intermittent discrete splenic nodules - probable discrete lymphoid hyperplasia, hematopoiesis, or similar
- Sonographically normal gastrointestinal tract with gastrointestinal ingesta - suspect recent meal ingestion

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Potential for left adrenomegaly is of unclear clinical significance given the lack of reported clinical signs i.e., PU/PD, polyphagia, etc., suggestive of adrenal hyperfunction. Full adrenal workup with LDDST, as well as screening blood pressure to assess for evidence of hypertension which may allude to emerging left adrenal neoplastic criteria such as pheochromocytoma, is recommended if clinically indicated.

Hepatosupportive medications including Denamarin and Ursodiol may prove beneficial. Screening hepatic FNA cytology could be considered pending additional diagnostics.

Ideally, sonographic reassessment of the left adrenal gland area, as well as the area of the right adrenal gland following documented fast is suggested.

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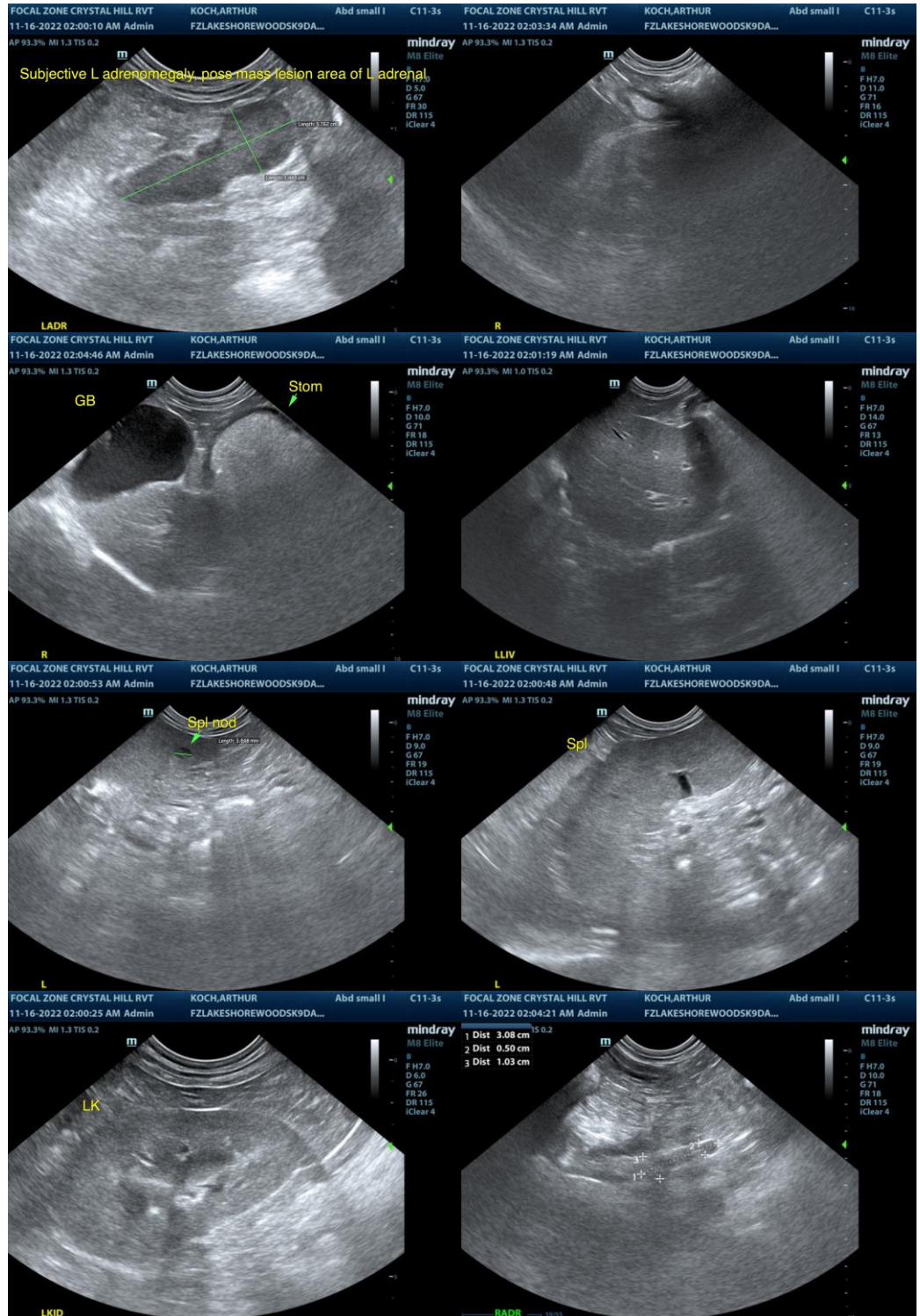
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**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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Daschund

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.

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[info@SonoPath.com](mailto:info@SonoPath.com)

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