



**PATIENT**

Akira Hetherington

**SPECIES**

Canine

**BREED**

Belgian Shepherd

**SEX**

Intact Female

**AGE**

9

**WEIGHT**

100 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Rachel Wiley

**HOSPITAL NAME**

Petvacx AH

**REFERRING VET**

Rachel Wiley

**INVOICE**

23673

**DATE**

7/28/23

**PRESENTING CLINICAL SIGNS**

History: 1 week history of acute onset vomiting, diarrhea, decreased energy.

Abnormal PE/Chem/CBC/UA Results: Mild ALKP elevation and abnormal CPL.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal. The pelvic urethra was imaged 1.0 cm beyond the cystourethral junction.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The left kidney measured 5.3 cm. The right kidney measured 6.7 cm.

**Adrenal Glands**

The **left adrenal gland** was mineralizing and presented a mineralizing nodule (1.4 cm) at the cranial pole. The caudal pole measured 0.4 cm. This appears encapsulated. No capsular expansion escape was noted, yet capsular expansion was noted.

The **right adrenal gland** was visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The right adrenal gland measured 1.2 cm at the cranial pole and 0.7 cm at the caudal pole.

**Spleen**

The **spleen** was largely smooth with subtle heterogeneous parenchymal changes while maintaining normal echogenic relationship to the liver and kidney. These changes are mild and consistent with normal age-related alteration. The capsule was smooth without noticeable impingement from within the spleen or from pathology in the adjacent abdomen. The splenic vasculature demonstrated normal volume without signs of congestion or significant contraction. No evidence of active acute or chronic inflammatory, neoplastic, or infarctual changes were noted. Cranial folding of the spleen was noted.

**Liver**

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some minor age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.



**PATIENT**

Akira Hetherington

**SPECIES**

Canine

**BREED**

Belgian Shepherd

**SEX**

Intact Female

**AGE**

9

**WEIGHT**

100 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Rachel Wiley

**HOSPITAL NAME**

Petvacx AH

**REFERRING VET**

Rachel Wiley

**INVOICE**

23673

**DATE**

7/28/23

**Gastrointestinal**

There was some residual chyme and gas was noted in the **stomach**, yet not pathological. This is consistent with end post prandial presentation. Transit of chyme into the small intestine was normal. Curvilinear patterns were maintained throughout the GI tract. No evidence of pathology. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

**Pancreas**

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

**Free Abdomen**

In the caudal abdomen, in the region of the iliac lymph nodes, a 2.0 cm x 3.0 cm hypoechoic undifferentiated **structure** was noted, presumed to be a lymph node. Ultrasound guided FNA is indicated.

**ULTRASONOGRAPHIC FINDINGS**

- Mineralizing left adrenal gland- adenoma, adenocarcinoma or pheochromocytoma (less likely). This appears resectable, however, likely benign, unless clinical signs support adrenal disease.
- Hypoechoic undifferentiated structure in the caudal abdomen- ultrasound guided FNA is indicated.
- Partially full stomach
- Age-related renal, hepatic and splenic changes

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

If Cushings disease is suspected, then assessment for functional left adrenal carcinoma is warranted. FNA of the presumed lymph node is warranted at the caudal abdomen. Blood pressure measurements are warranted. If urine specific gravity is <1.020, and the patient appears cushingoid, then urine cortisol to creatinine ratio, followed by LDDST is indicated. The presumed lymph node may be suppurative or potential emerging round cell neoplasia.



**PATIENT**

Akira Hetherington

**SPECIES**

Canine

**BREED**

Belgian Shepherd

**SEX**

Intact Female

**AGE**

9

**WEIGHT**

100 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Rachel Wiley

**HOSPITAL NAME**

Petvax AH

**REFERRING VET**

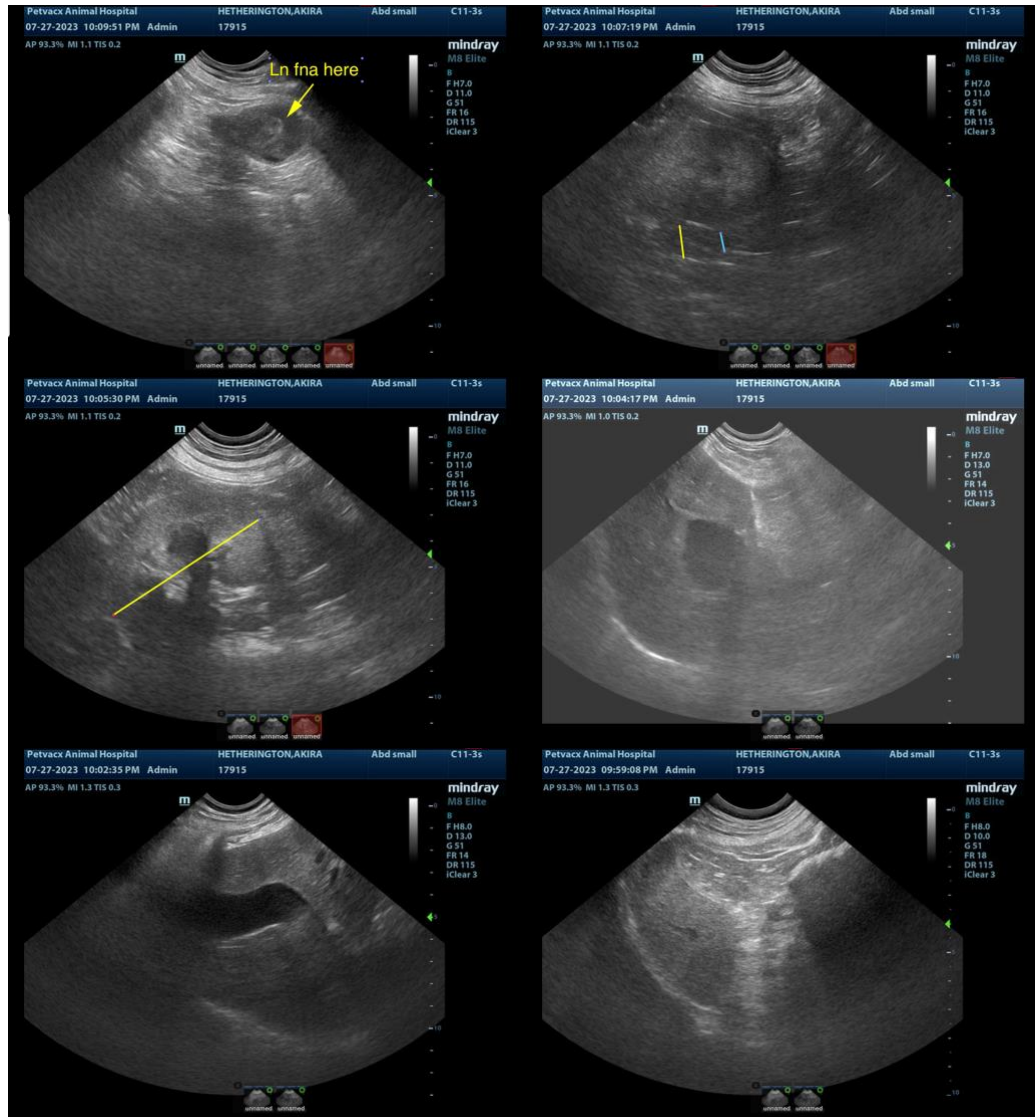
Rachel Wiley

**INVOICE**

23673

**DATE**

7/28/23





**PATIENT**

Akira Hetherington

**SPECIES**

Canine

**BREED**

Belgian Shepherd

**SEX**

Intact Female

**AGE**

9

**WEIGHT**

100 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Rachel Wiley

**HOSPITAL NAME**

Petvacx AH

**REFERRING VET**

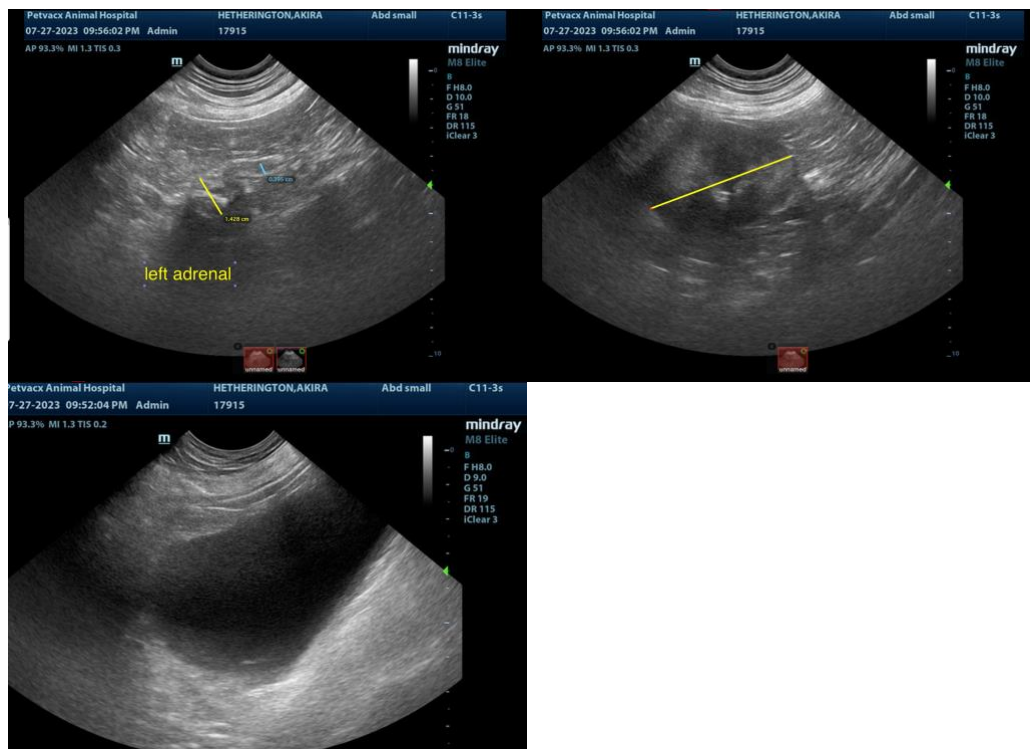
Rachel Wiley

**INVOICE**

23673

**DATE**

7/28/23



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.

**Eric Lindquist**, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com  
info@SonoPath.com