



PATIENT

Mittens Mueller

PRESENTING CLINICAL SIGNS

Patient presents for anorexia, elevated liver enzymes, and low K+. Abnormal PE/Chem/CBC/UA Results: AST 1504, ALT 131, K+ 2.8, Mg 1.2, CPK - 25,395. USG: 1.014.

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

BREED

DSH

The right kidney is normal in size (3.39 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

SEX

Spayed Female

The left kidney is normal in size (3.26 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

AGE

16 Years

Adrenal Glands

The right adrenal gland is large in size (0.94 cm x 0.81 cm) with a round shape and normal contour. Corticomedullary structure is decreased. Visible surrounding vasculature appears normal.

WEIGHT

5.8 Pounds

The left adrenal gland is normal in size (0.28 cm thick), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

IMAGING PERFORMED BY

Kelly Vazquez

Liver

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

HOSPITAL NAME

Animal General
on the Hudson

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. The cystic duct and common bile duct are slightly tortuous and just above the upper limit of normal dilation. The common bile duct measures 0.48 cm.

REFERRING VET

Dr. Karen Zelinski

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

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The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions

DATE

2/9/22



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per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

SPECIES

Feline

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

BREED

DSH

The left pancreas is prominent and hypoechoic to surrounding tissue. The visible capsule is smooth and normal in contour. Parenchyma is mildly coarse. There is no visible pancreatic duct dilation. No evidence of active peripancreatic inflammation.

SEX

Spayed Female

Free Abdomen

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

AGE

16 Years

- Chronic pancreatitis with mild common bile duct dilation – Rule out normal patient variant versus dilation due to chronic pancreatitis versus mild chronic cholangitis.
- Right adrenal mass – Consistent with a right adrenal tumor most consistent with an aldosterone producing tumor, given the clinical history and laboratory changes. An adrenal cortical adenoma, adenocarcinoma or pheochromocytoma are possible, yet considered exceedingly less likely.

WEIGHT

5.8 Pounds

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

INTERPRETED BY

Eric Lindquist, DMV

This patient's history, clinical signs, laboratory changes and ultrasound findings are highly suggestive of an aldosterone producing adrenal tumor (Conn's syndrome) and a concurrent hypokalemic polymyopathy. Diagnostic recommendations include an aldosterone level as well as blood pressure, as many patients with Conn's syndrome are hypertensive. If an aldosterone producing tumor is diagnosed, treatment recommendations are typically surgery.

DABVP, Cert. IVUSS

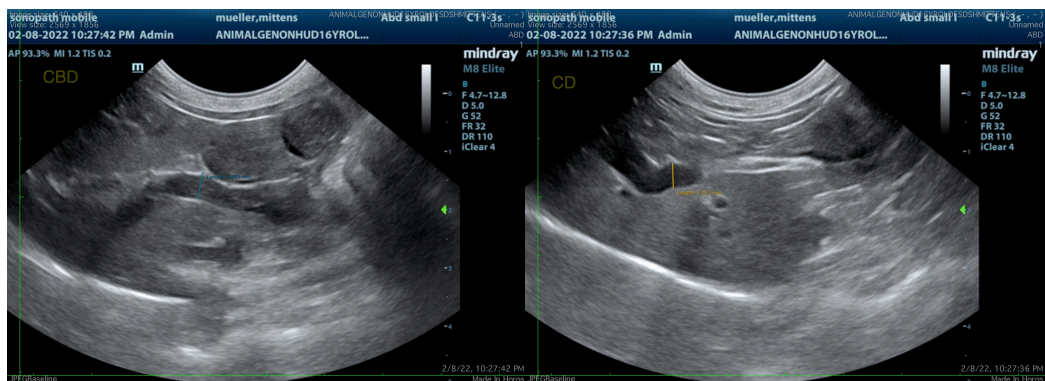
IMAGING PERFORMED BY

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In the meantime, medical management with Spironolactone, Amlodipine (if hypertension is diagnosed), and potassium supplementation may help to start alleviating clinical signs. If ALP and total bilirubin are normal, and there are no gastrointestinal clinical signs, the biliary system/pancreatic findings are considered incidental and not clinically relevant at this time.

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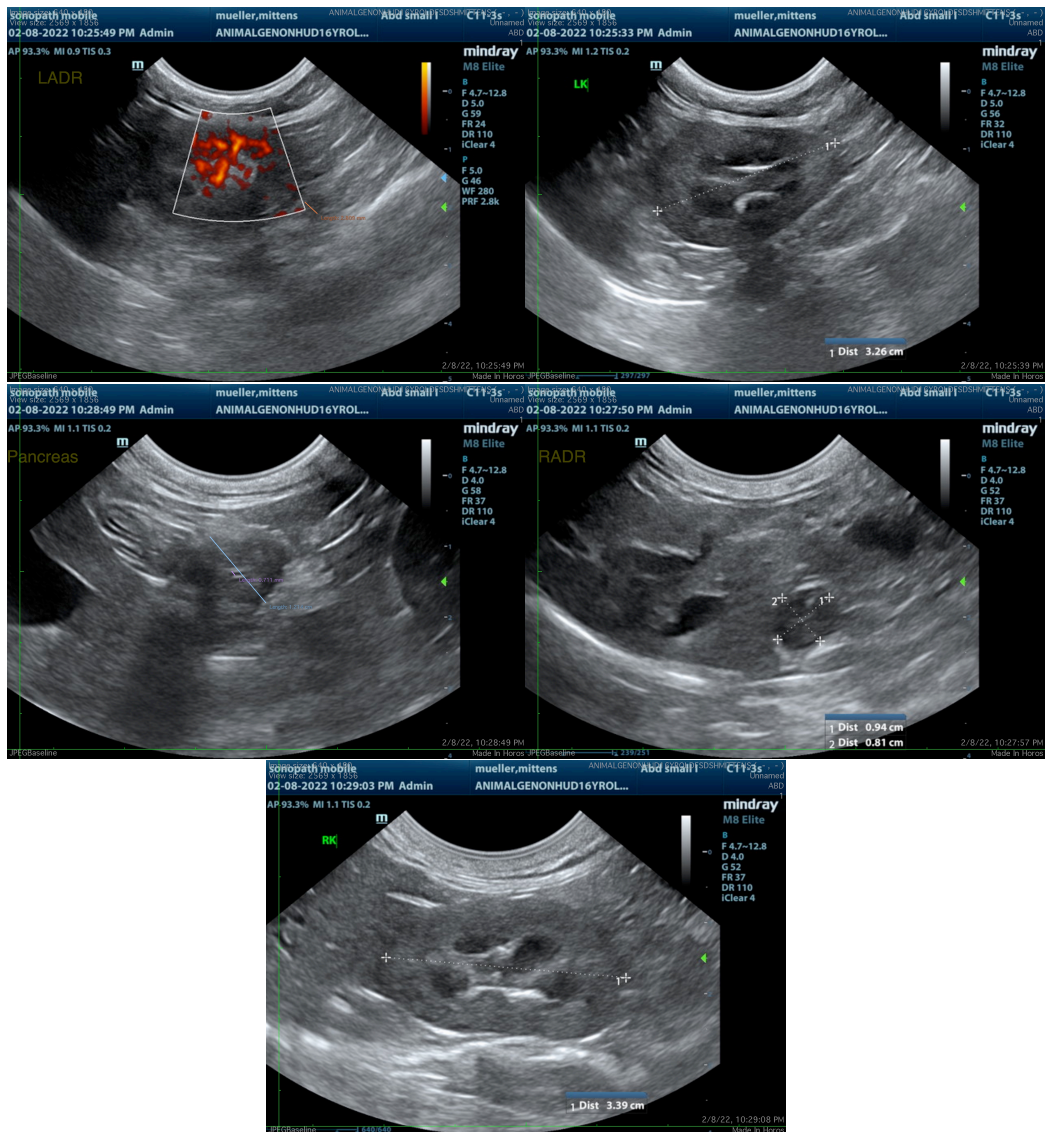
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Beth Johnson, DVM, DACVIM
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