

**DATE PRESENTING CLINICAL SIGNS**

3/28/23

About a week of no appetite and diarrhea. no vomiting, mild azotemia that improved with sq-fluids but still not eating well.

PATIENT

Keira Batdorf

Current Medications: Metro 250mg (1 BID), Amoxi 400mg (1 BID)
Cerenia 24mg (2 SID), Gabapentin 100mg (2 BID), Mirtazipine 15mg (1 SID)
Lab Results: See attached.

SPECIES

Canine

Radiographs: Appears to have a possible mass effect in the retroperitoneal space on x-ray and with a quick in house ultrasound there appears to be some fluid in the retroperitoneal space.

Date of Previous IntraPet Ultrasound: 3/12/20. See attached.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

BREED

Shetland Sheepdog

Imaging Performed By: Rachel Brillhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

AGE

6/14/10

The left kidney has a normal shape and size (6.25 cm) with early hydronephrosis, with the renal pelvis measuring at 0.84 cm in diameter. Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is a moderate to large amount of hypoechoic echogenic tissue/fluid surrounding the caudal aspect of the left kidney. There is no evidence of nephroliths, or infarcts. Renal vasculature is normal.

WEIGHT

50 Pounds

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
(Small Animal Internal
Medicine)

The right kidney has a normal shape and size (6.69 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

HOSPITAL NAME

Greenbrier Vet Clinic

Adrenal Glands

The region of the left adrenal gland is very abnormal. There is a large mixed echogenic, hypoechoic, somewhat cavitated, expansile mass effect medial to the left kidney measuring >6.92 cm x 4.04 cm. No normal left adrenal is observed, and this could be consistent with a large adrenal mass lesion. There is impingement on local vasculature, but no definitive invasion noted. This mass effect is large enough to also include the region of the right adrenal.

REFERRING VET

Dr. Boccanfuso

The right adrenal gland is normal in size measuring 0.72 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect. A small pinpoint mineralization is noted.

INVOICE

46207

Spleen

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is mildly heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a mild amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measures 0.37 cm. Jejunum wall measures 0.30 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

There is a scant amount of free fluid visualized as well as a moderate amount of echogenic fluid/tissue surrounding the left kidney. The omentum is severely hyperechoic around the mass effect in the left kidney.

PRIMARY FINDINGS

- Large, irregular, hypoechoic, mixed echogenic and mildly cavitated mass effect medial to the left kidney – Primary differential would be a large adrenal mass. Consider such differentials as pheochromocytoma, carcinoma, other.
- Significant renal pelvic dilation and surrounding echogenic fluid – Findings are concerning for early hydronephrosis and likely perinephric inflammation secondary to the mass effect/possible hemorrhage.

SECONDARY FINDINGS

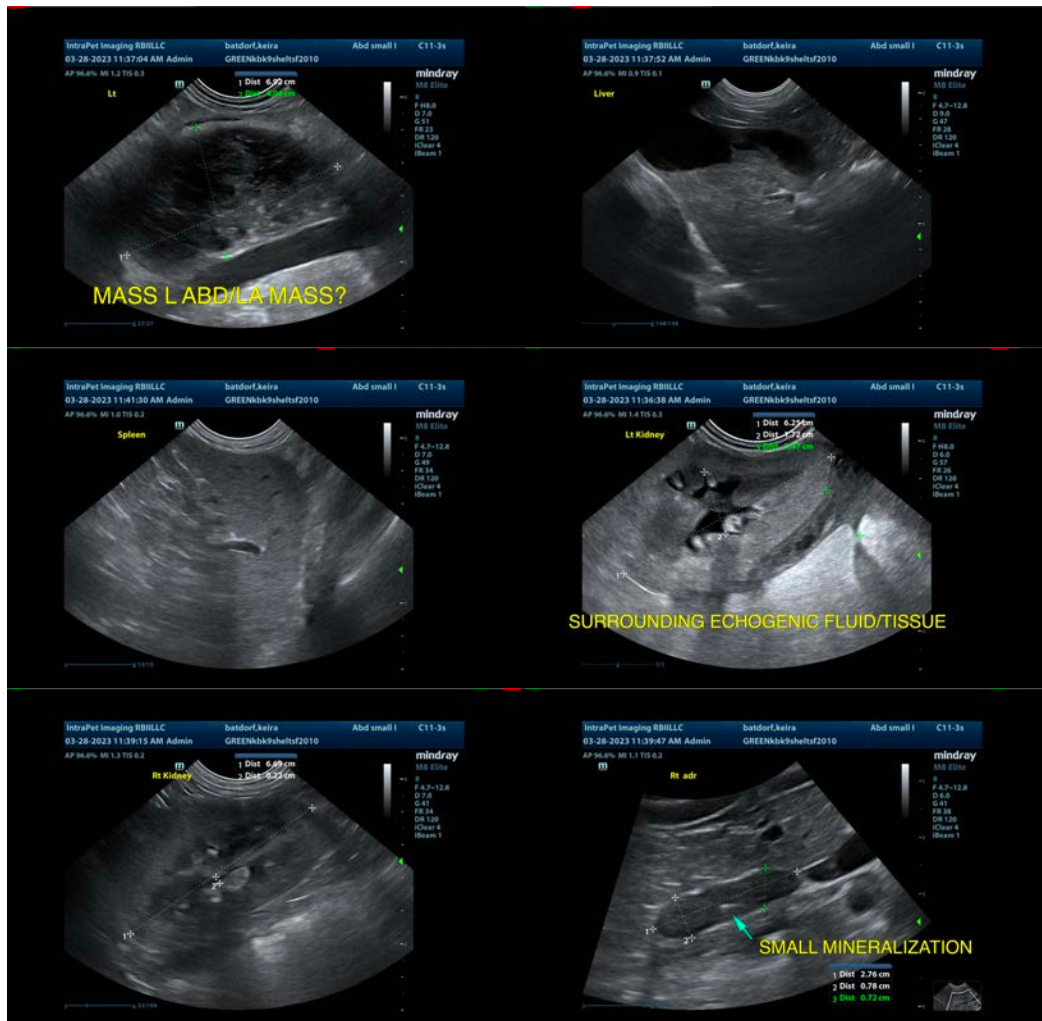
- Mildly heterogeneous liver – The hepatic changes are consistent with age-related parenchymal remodeling and are not considered clinically significant at this time.
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.
- Pinpoint mineralization visualized in the right adrenal – The significance of this is unclear. Recommend continued monitoring.

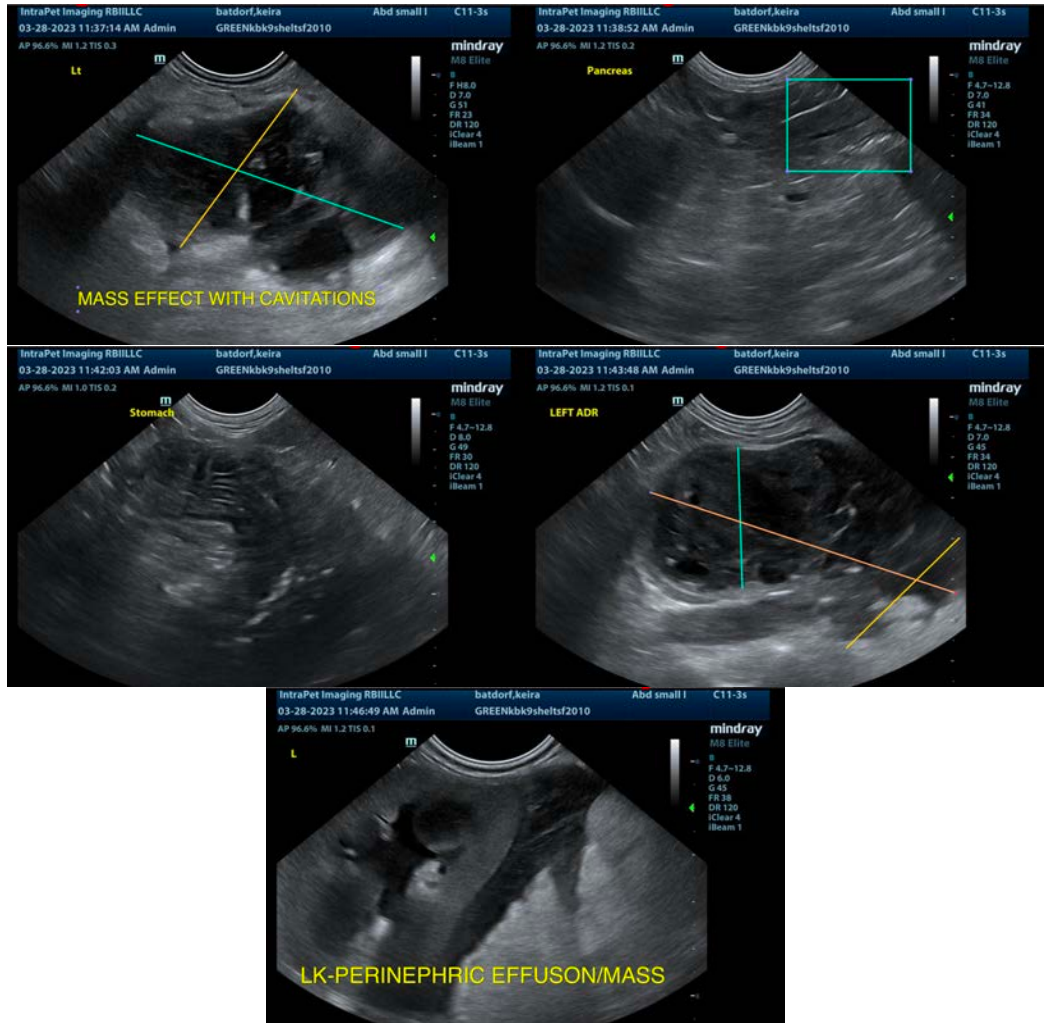
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large, somewhat cavitated, mixed echogenic, irregular and expansile mass effect visualized medial to the left kidney. The primary suspicion would be that of an adrenal mass lesion with extensive expansion. Additionally, there is what appears to be echogenic fluid surrounding the left kidney, possibly consistent with hemorrhage. Additionally, there is severe renal pelvic dilation/early hydronephrosis of the left kidney, possibly due to an obstructive effect on the kidney from the mass lesion.

If surgical intervention would be considered, then recommend a contrast CT scan to further evaluate the extent of this mass lesion and look for any evidence of metastatic lesions. A fine needle aspirate of the mass lesion could be considered, provided coagulation parameters are normal and there is no evidence of hypertension with a blood pressure measurement. Although vascular invasion is not definitively visualized, there is concern based on the extent of this mass lesion and its impingement on local vasculature.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





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.

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