



PATIENT PRESENTING CLINICAL SIGNS

Socks Watts Patient managed for chronic renal failure, doing well on benazepril at home. Recent history (1-2 weeks) of decreased appetite. Owner having to encourage P to eat over last few days. Exam showed no significant changes, bloodwork showed hypokalemia. Recommend U/S as next step in workup.

SPECIES Abnormal PE/Chem/CBC/UA Results: Potassium 2.8 (3.5 - 5.8) mmol/L Rest of values WNL

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED *Urinary System*

DSH

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.

SEX

Neutered Male

The kidneys are normal in size, but bilaterally irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. There is no pyelectasia noted and no mineral is observed. The left kidney measured 4.85 cm. The right kidney measured 3.7 cm. A 1.5 cm round, hypoechoic nodule is noted on the cranial pole of the right kidney, resulting in a capsular bulge.

AGE

13 Years

Adrenal Glands

WEIGHT

11.8

The right adrenal gland is normal in size (0.26 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.34 cm), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

INTERPRETED BY *Spleen*

Beth Johnson, DVM
DACVIM

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

Dr. Jack Reese

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

Willow Run VC

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

REFERRING VET

Dr. Jack Reese

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.

INVOICE

39116

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 per min). The lumen of the small intestine is largely empty with no evidence of obstruction, foreign material or infiltrative disease. However, some mild fluid dilation and hyperperistalsis of the proximal duodenum is noted.

DATE

6/29/22



PATIENT

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

SPECIES

Pancreas

Feline

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

BREED

Free Abdomen

DSH

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

SEX

ULTRASONOGRAPHIC FINDINGS

Neutered Male

- Chronic Kidney Disease - This appearance of the kidneys is consistent with chronic kidney disease such as chronic glomerular or interstitial nephritis, chronic pyelonephritis, etc.

AGE

13 Years

- Right kidney nodule – concerning for infiltrative neoplasia versus renal cell carcinoma, lymphoma, metastatic neoplasia, other. A benign lesion is possible, but considered less likely.

WEIGHT

11.8

- Mild fluid distention and hyperperistalsis of the duodenum – Rule out normal post-prandial variant versus mild duodenitis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given this patient’s history and the presence of the kidney nodule, further diagnostic recommendations include:

A fine needle aspirate of the right kidney nodule, if patient’s coagulation status is appropriate. If not recently evaluated, for full evaluation of the kidneys, blood pressure and Urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

In the meantime, the appearance of the duodenum is consistent with some acute GI upset or gastroenteritis. This could be secondary to the reported chronic kidney disease, dietary discretion, etc. Therefore, recommendations include supportive medical management with antiemetics, gastroprotectants, and appetite stimulants, if needed. Potassium supplementation is also important, as weakness from Robitussin could be contributing to the malaise and clinical signs.

INTERPRETED BY

Beth Johnson, DVM
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IMAGING PERFORMED BY

Dr. Jack Reese

HOSPITAL NAME

Willow Run VC

REFERRING VET

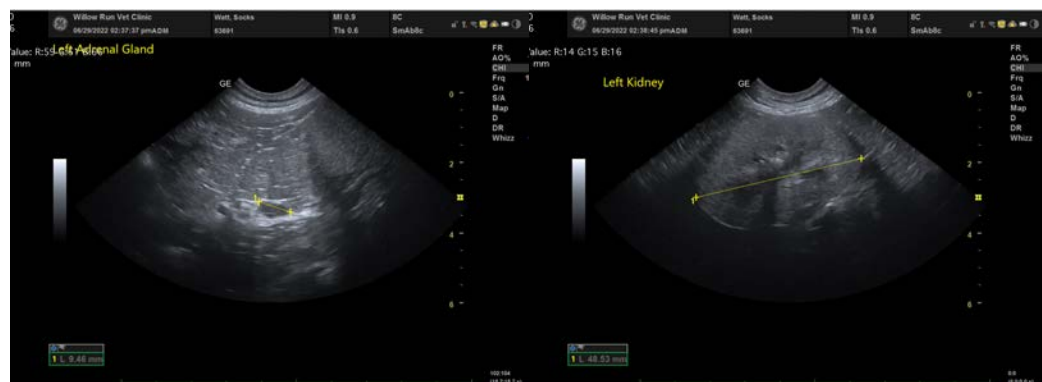
Dr. Jack Reese

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PATIENT

Socks Watts

SPECIES

Feline

BREED

DSH

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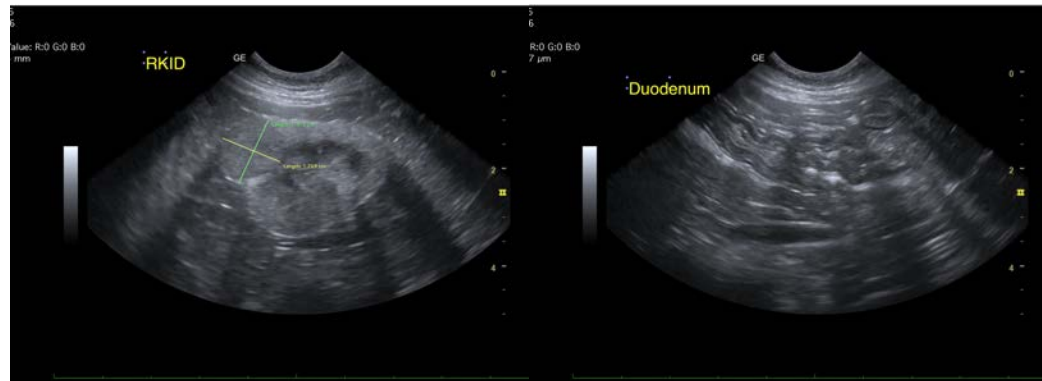
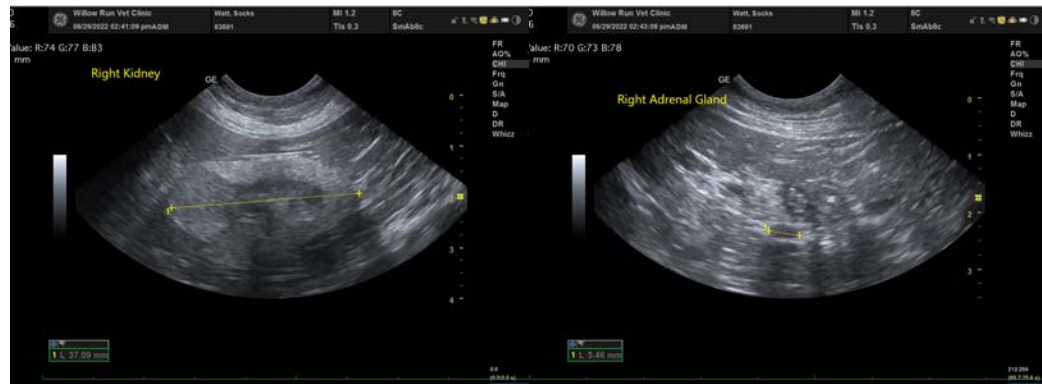
Neutered Male

AGE

13 Years

WEIGHT

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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.

INTERPRETED BY

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