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Clinical Sonography & Telecytology
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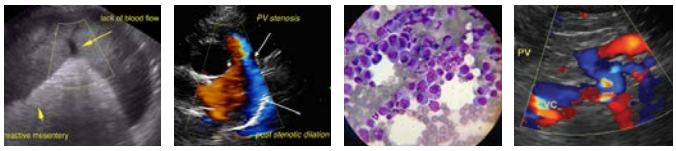

SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Ella Grant

SPECIES

Canine

BREED

Min Pin X

SEX

Female

AGE

14 Years

WEIGHT

21.8 Pounds

INTERPRETED BY

Beth Johnson, DVM DACVIM

HOSPITAL NAME

Willow Run VC

REFERRING VET

Dr. Molly Arnold

INVOICE NUMBER

25748

DATE

9/22/21

PRESENTING CLINICAL SIGNS

P has Cushings disease and Diabetes. Both are currently well managed. Chronic UTI's - managed with Nitrofurantoin 5 days every month. P has been panting more in the past few months and had a few weeks of coughing that responded to Doxycycline treatment. Appetite is waxing and waning - most significantly noted when on nitrofurantoin but has been a "picky eater" for years.
Abnormal PE/Chem/CBC/UA Results: No recent BW Radiographs - chest was unremarkable. Abdominal (cranial) mass effect noted on periphery and confirmed on abdominal radiographs. No other changes noted.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

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.

Right kidney is normal in size (4.54 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.

Left kidney is normal in size (4.87 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. Mild pyelectasia is noted measuring 0.24 cm. There is no evidence of mineral or infarcts observed.

Adrenal Glands

The right adrenal gland is enlarged in size (2.2 cm long x 1.3 cm at the cranial pole and 0.94 cm at the caudal pole). Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is enlarged in size (2.4 cm long x 0.45 cm at the cranial pole and 0.9 cm at the caudal pole). Normal shape and contour are maintained. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Spleen

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.

Liver

Liver is subjectively enlarged. Margins are smooth but round. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen. An approximately 1.0 cm hypoechoic nodule in the cranial mid liver is seen. A hypoechoic, heterogeneous mass is seen in the caudal right liver with a cavitated center, measuring 8.0 cm x 5.0 cm. There is a 2.0 cm anechoic structure attached to the cranial most portion of the mass. Visible vasculature and biliary tree appear normal without distension or congestion.

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.

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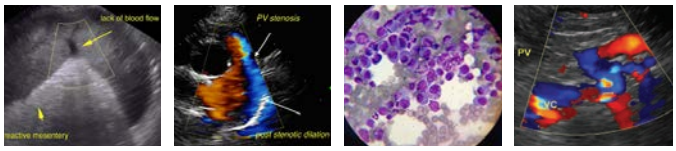

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Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

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 empty with no evidence of obstruction, foreign material or infiltrative disease.

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

Pancreas

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.

Free Abdomen

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

ULTRASONOGRAPHIC FINDINGS

- Left kidney pyelectasia - Differentials for pyelectasia include pyelonephritis, diuresis, congenital malformation or ureteral or lower urinary tract obstruction.
- Bilateral adrenomegaly – consistent with the reported history of previously diagnosed hyperadrenocorticism.
- Hyperechoic hepatomegaly canine – most consistent with benign steroid (endocrine) hepatopathy or reactive or idiopathic hepatopathy. Infiltrative neoplasia such as round cell neoplasia is also possible, but considered less likely.
- Hypoechoic hepatic nodules – differentials include both benign nodular hyperplasia or regenerative nodules as well as infiltrative neoplasia.
- Second larger heterogeneous liver mass – more concerning for infiltrative neoplasia such as primary hepatocellular carcinoma or round cell neoplasia, or sarcoma. A benign granuloma or abscess is also possible given the cavitated nature, but seems less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Recommendations include surgical excisional biopsies of the liver mass with concurrent biopsy of the smaller liver nodule. Incidentally, given this patient's chronic urinary tract infections and the mild pyelectasia, recheck urinalysis and culture are recommended if not recently evaluated. If surgery is not possible in this patient or is declined as an option, decreasing the therapy that is currently in place for the hyperadrenocorticism may help improve the patient's overall appetite and attitude.

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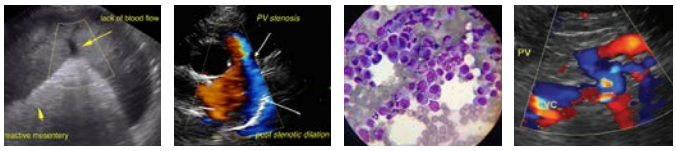

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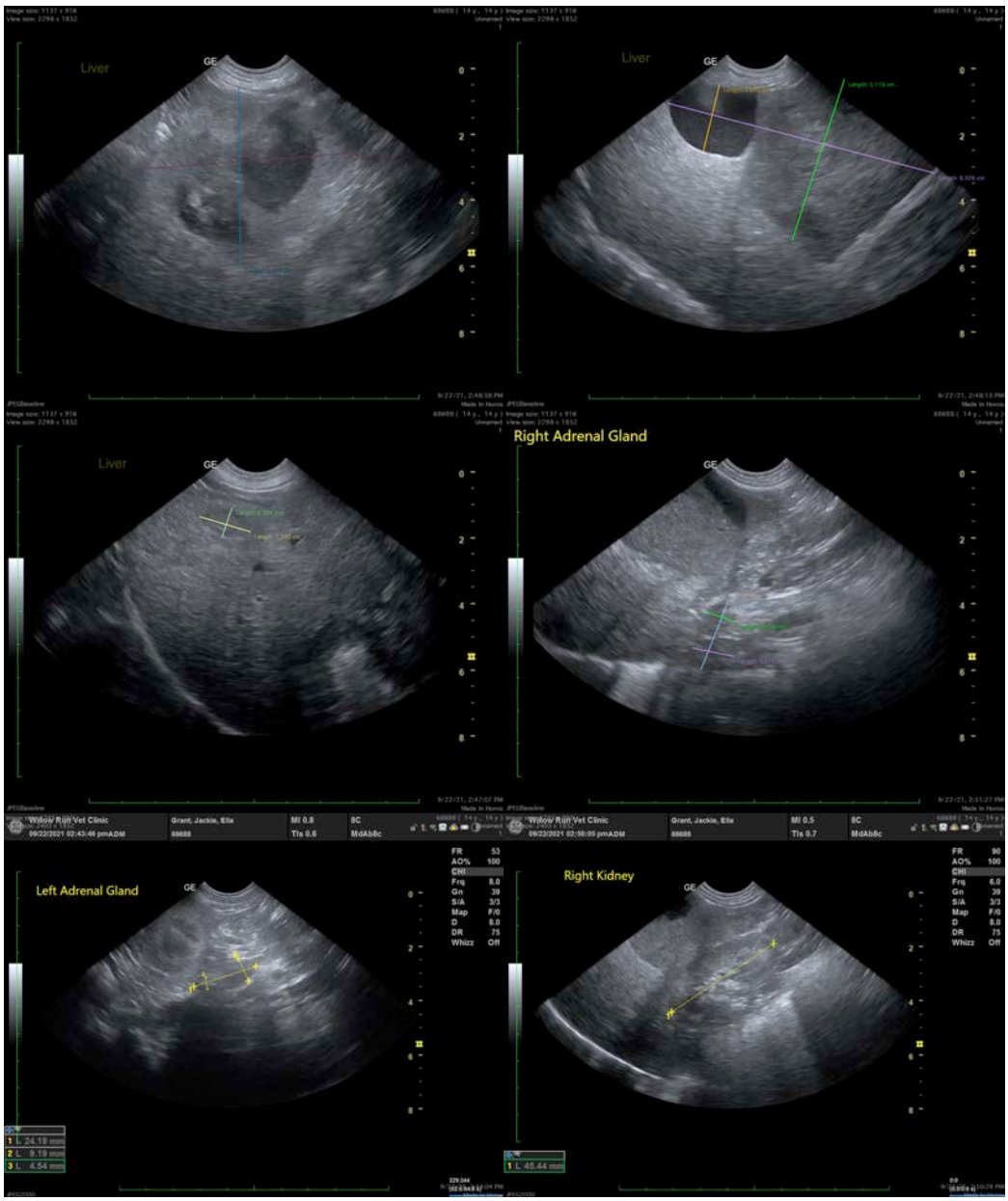

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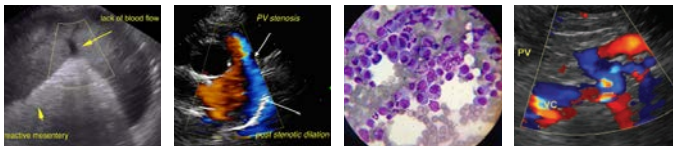

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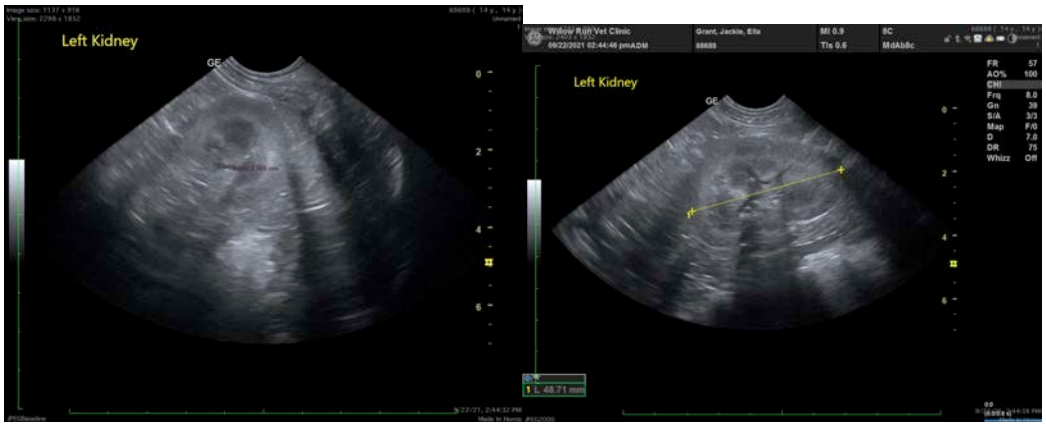

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Beth Johnson, DVM, DACVIM
Beth.Johnson@sonopath.com