



PATIENT PRESENTING CLINICAL SIGNS

Mack Hicks Chronic diarrhea with no improvement with food trial (Hill's GI Biome or Royal Canin HP Diet). Mack did better with a homemade diet of boiled ground beef & white rice. History of CAD.

SPECIES Medication: Provable

Canine Platelets 501, Albumin 2.2, Cholesterol 114, Na/K ratio 30, Urine specific gravity- 1.055, 1+Protein

BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

English Bulldog *Urinary System*

SEX The urinary bladder, trigone, and cystourethral junction exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted. The urethra exhibited normal structure and tone to a depth of 3.0 cm.

AGE No overt pathology was noted in the area of the residual prostate.

2011 The area of the aortic trifurcation was free of pathology.

WEIGHT Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 5.8 cm in length. The right kidney measured 5.5 cm in length.

INTERPRETED BY Adrenal Glands

R. McKenzie Daniel, DVM, DABVP (Canine and Feline) The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.8 cm length x 0.78 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 2.7 cm length x 0.69 cm width at the caudal pole.

IMAGING PERFORMED BY
Rebekah Jakum, CVT
ARDMS/RVT

HOSPITAL NAME *Spleen*
Lehigh Valley AH (Bath) The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

REFERRING VET *Liver/ Gallbladder*

Dr. Tan The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

INVOICE
15298

DATE
10/27/22



PATIENT *Gastrointestinal*

Mack Hicks The stomach presented intact wall layering with a normal wall layer ratio. Mild nonshadowing ingesta / chyme was present in the gastric lumen.

SPECIES The small intestine presented intact wall layering with segmental propensity for mildly prominent intestinal mucosa layer, along with intermittent hyperechoic mucosal speckling.

Canine

The colon exhibited sonographically unremarkable wall layering. The colon exhibited generalized distention with nonformed fecal matter.

BREED

English Bulldog

Pancreas

SEX

The pancreas base and right pancreatic limb exhibited mild prominent size with areas of capsule asymmetry. Nonhomogeneous to mild variably echogenic parenchyma was present. Suspect distal right pancreatic limb was noted. Mildly expansive to cystic nodule was present. Potential for overlying focal cystic mesenteric lymph nodes is also possible. The suspected right pancreatic nodule measured 3.3 cm in diameter. No evidence of peripheral inflammation or nodule mineralization was noted.

MN

AGE

2011

Free Abdomen

No evidence of diffuse lymphadenopathy or peritoneal free fluid.

WEIGHT

57.8

ULTRASONOGRAPHIC FINDINGS

- Enteropathy exhibiting intermittent hyperechoic mucosal speckling
- Heterogeneous to mildly irregular pancreas base / right pancreatic limb with suspect distal right pancreatic cystic nodule
- Distended colon with nonformed fecal matter

INTERPRETED BY

R. McKenzie Daniel,
 DVM, DABVP
 (Canine and Feline)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Considerations in this patient, given the history of chronic diarrhea, may include dietary intolerance / food allergy, dysbiosis, occult parasitism, occult Addison's Disease, IBD / PLE (strong consideration, given evidence of decreased albumin levels), and less likely infiltrative neoplasia. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended.

IMAGING

PERFORMED BY

Rebekah Jakum, CVT
 ARDMS/RVT

HOSPITAL NAME

Lehigh Valley AH
 (Bath)

REFERRING VET

Dr. Tan

Some or all of the following protocol may be considered empirically. Intestinal biopsies would be required for a definitive diagnosis, and may be considered if albumin levels (>2.0). Recheck full CBC/Chemistry panel and Urinalysis is suggested. Baseline UPC could also be considered if evidence of progressive proteinuria. FNA cytology of the suspected pancreatic nodule for further clarification vs. sonographic monitoring for evidence of progression is suggested.

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OBJECTIVE: keep albumin levels > 2 g/dl, avoid thromboembolism and cavitory effusions, monitor concurrent PLN (Wheaton Terrier PLE/PLN) and liver disease:

Plasma 10 mL / kilogram IV over 4 hours

Or **Human albumin** 2 ml/kg/h over 10 hours. Total daily volume 20.l/kg/day

And Colloids/Hetastarch

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PATIENT

10 to 20 mL per kilogram per day and dogs
10 to 15 mL per kilogram per day cats
Mack Hicks (Can bolus first 1/3 of dose over 15 minutes)
& maintain on LRS maintenance otherwise.

SPECIES

Metronidazole (10-20 mg/kg po bid)
Famotidine 1 mg/kg lv Im po dc Sid /bid
Canine **Sucralfate** 0.5-1 g po tid dogs, 0.5 g bid cats in slurry **Or Misoprostol** 1-5 ug/kg po tid
Diet: Highly digestible high quality protein, low fiber, low fat diet (< 15% of dry matter). Hydrolyzed protein or novel protein. Purina HA or Royal Canine HP or similar.

BREED

English Bulldog **Prednisone** or prednisolone 2 mg/kg bid x 3-5 days then 2 mg/kg sid. **Chlorambucil** in refractive severe IBD/alimentary lymphoma cases (monitor cbc for rare bone marrow suppression) 4 mg/m² Q 24-48 hours.

SEX

Cobalamine (B12) 250-1500 ug/dog weekly x 6 weeks.

MN

Calcium supplementation if necessary.

Aspirin 0.5-1 mg/kg/day **or Clopidrel** (Plavix) 1-5 mg/kg/day.

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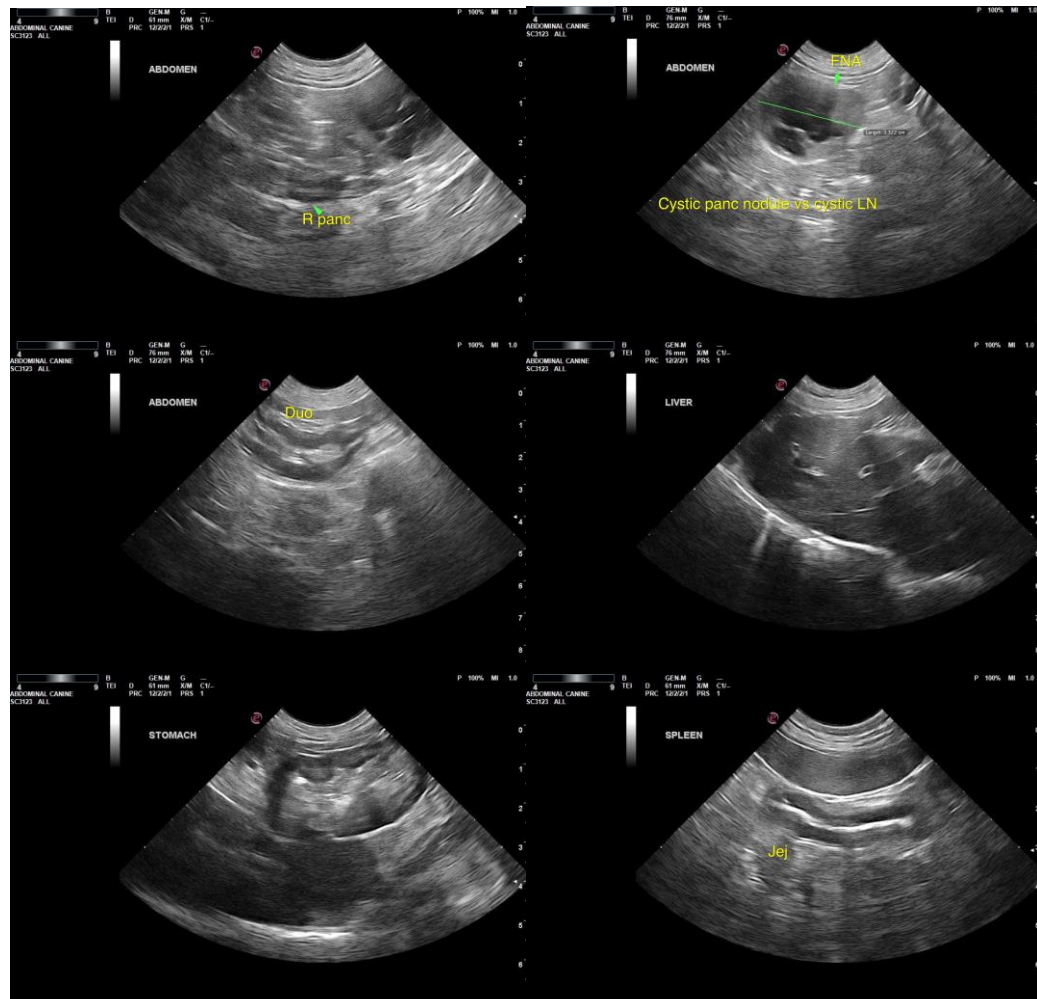
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PATIENT

Mack Hicks

SPECIES

Canine

BREED

English Bulldog

SEX

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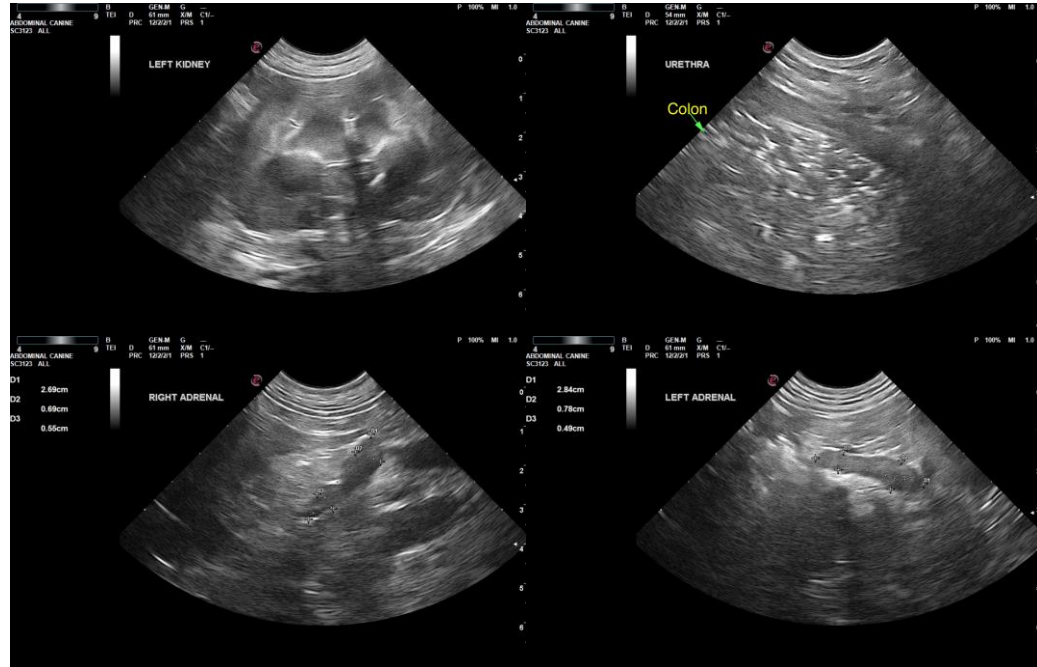
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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