

**PATIENT PRESENTING CLINICAL SIGNS**

Charlie Nobes History: On and off poor appetite. Lower than usual energy. Not drinking much. Explosive diarrhea in April.

**SPECIES**

Abnormal PE/Chem/CBC/UA Results: Only changes ALB low end of normal.

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

**Urinary System**

Toy Poodle Mix

Urinary bladder is adequately 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 prostate is very mildly enlarged for a dog neutered as a puppy, measuring 1.5 cm – 2.0 cm wide. The parenchyma is diffusely homogeneous and normal appropriate echogenicity. Normal distinct margins are maintained, as is the symmetrical bilobed shape. No mineral, cysts, etc. are noted.

**AGE**

5 Years

Left kidney is normal is size (4.07 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 or infarcts observed. Non-obstructive linear multifocal hyperechoic diverticular foci with acoustic shadowing are noted.

**WEIGHT**

13.6 Pounds

Right kidney is normal is size (4.36 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 or infarcts observed. Non-obstructive linear multifocal hyperechoic diverticular foci with acoustic shadowing are noted.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Adrenal Glands**

Left adrenal gland is normal in size (1.61 cm in length x 0.46 cm at cranial pole and 0.42 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**IMAGING PERFORMED BY**

Crystal Hill

Right adrenal gland is normal in size (1.44 cm in length x 0.91 cm at cranial pole and 0.41 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

**HOSPITAL NAME**

Mountain AH

**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.

**REFERRING VET**

Dr. Woodward

**Liver**

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.

**INVOICE**

16221

**DATE**

6/21/22

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.



**PATIENT**

***Gastrointestinal***

Charlie Nobes

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

**SPECIES**

Canine

The visible small intestine demonstrates areas of thick muscularis layer relative to mucosa (disruption of the normal 1:3 muscularis:mucosa ratio). Small intestinal submucosa is slightly irregular, thick and hyperechoic, without evident loss of layering appreciated. The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

**BREED**

Toy Poodle Mix

The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.

**SEX**

***Pancreas***

Neutered Male

The observed pancreas appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

**AGE**

***Free Abdomen***

5 Years

There is no evidence of peritoneal effusion.

**WEIGHT**

Mild hypoechoic slightly heterogeneous mesenteric lymphadenopathy is present with one measured lymph node medial to the spleen, measuring 0.85 cm x 1.5 cm in size.

13.6 Pounds

**ULTRASONOGRAPHIC FINDINGS**

**INTERPRETED BY**

**Primary Findings**

Beth Johnson, DVM  
DACVIM

- Inflammatory bowel disease pattern. This finding has been reported with infiltrative bowel disease including both benign inflammatory disease as well as infiltrative neoplasia such as lymphoma. No concurrent lymphadenopathy, loss of layering, etc. is noted to make lymphoma more probably, but lymphoma cannot be definitively ruled out without tissue sampling.
- Mesenteric lymphadenopathy, most consistent with reactive lymphadenopathy, infiltrative neoplasia is possible but considered less likely.

**IMAGING PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Mountain AH

**Secondary Findings**

**REFERRING VET**

Dr. Woodward

- Nonobstructive dystrophic mineralization bilaterally in the kidneys
- The prostate is mildly enlarged for a dog neutered as a puppy. If this dog was neutered late in life, the appearance is much more normal. If this dog was neutered as a young puppy, rule outs include normal patient variant versus mild prostatitis versus other. \*See recommendations below.

**INVOICE**

16221

\*There is no ultrasonographic evidence of lacteal dilation or lymphangiectasia. However, given the reportedly low albumin, it has to be considered.

**DATE**

6/21/22

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

1. A gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory is recommended for further evaluation of GI and pancreatic function.



**PATIENT**

Charlie Nobes

**SPECIES**

Canine

**BREED**

Toy Poodle Mix

**SEX**

Neutered Male

**AGE**

5 Years

**WEIGHT**

13.6 Pounds

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Mountain AH

**REFERRING VET**

Dr. Woodward

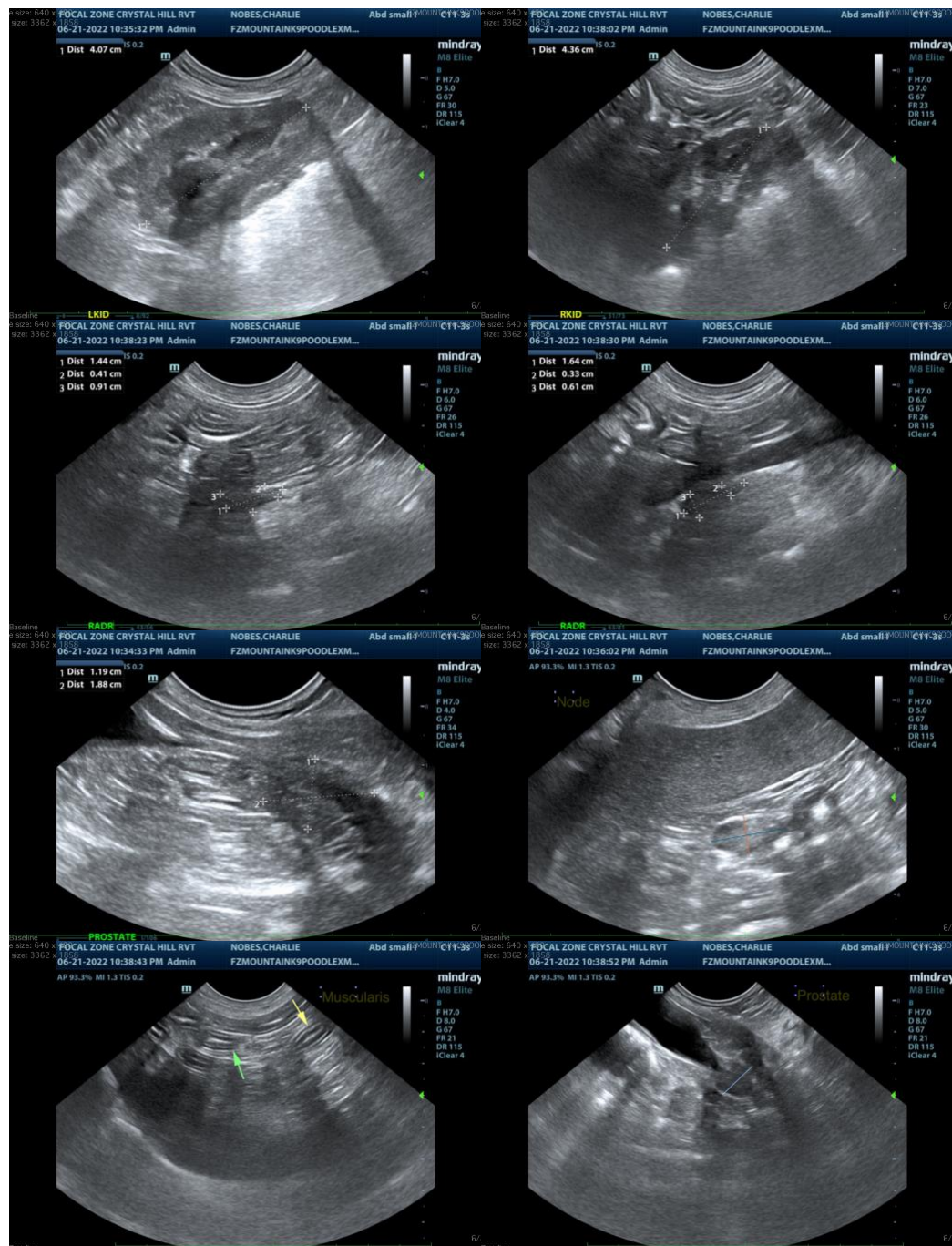
**INVOICE**

16221

**DATE**

6/21/22

- 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.
- If this patient was neutered as a young puppy, and the urinalysis +/- urine culture are clean, recommendations include close monitoring of the prostate for progressive changes, as there are no immediate changes to indicate aggressive disease versus normal patient variant.





**PATIENT**

Charlie Nobes

**SPECIES**

Canine

**BREED**

Toy Poodle Mix

**SEX**

Neutered Male

**AGE**

5 Years

**WEIGHT**

13.6 Pounds

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING  
PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Mountain AH

**REFERRING VET**

Dr. Woodward

**INVOICE**

16221

**DATE**

6/21/22



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