



**PATIENT PRESENTING CLINICAL SIGNS**

Troon Arnold History: chronic pancreatitis and elevated liver enzymes meds: metacam, mirtazapine, buprenorphine  
Abnormal PE/Chem/CBC/UA Results: ALP 693, elevated precision PSL, mild thrombocytosis, elevated PLI, 4DX negative.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

*Urinary System*

Cocker spaniel

The urinary bladder and visible portion of the pelvic urethra are normal for the degree of luminal distension. The urine is mostly anechoic with no evidence of debris. The mucosal surface is slightly irregular. Cystic calculi and discrete masses are not observed. The region of the trigone and the visible portion of the proximal urethra are normal.

**SEX**

Male, neutered

The prostate is normal in size (1.07 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

**AGE**

11 yrs.

The left kidney is normal in size (5.93 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. The cortex is hyperechoic. There is moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

**WEIGHT**

29 lbs. .

The right kidney is normal size (6.30 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

*Adrenal Glands*

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(*Small Animal Internal  
Medicine*)

The left adrenal gland is normal size (0.57 cm at cranial pole) (0.63 cm at caudal pole) (2.31 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**IMAGING PERFORMED BY**

Kelly Reshny, RVT

The right adrenal gland is normal size (0.82 cm at cranial pole) (0.63 cm at caudal pole) (2.55 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**HOSPITAL NAME**

Tilsonburg VC

*Spleen*

**REFERRING VET**

Dr. Reed

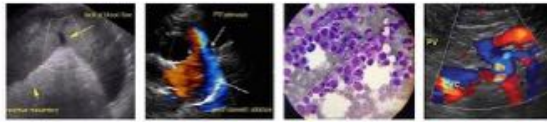
The spleen is normal in size (1.14 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

*Liver*

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and subtly heterogeneous in appearance with at least one small, ill-defined hyperechoic area. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A few polypoid lesions are arising from the luminal surface. A small amount of echogenic debris is observed within the lumen, some of which is gravity-dependent and some of which is

**DATE**

4/12/22



**PATIENT**

adhered to the luminal surface. The cystic and common bile ducts are normal/not seen.

Troon Arnold

***Gastrointestinal***

**SPECIES**

Canine

The gastric lumen is distended with a large amount of ingesta and what appears to be ill-defined fluid pockets trapped within the ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

**BREED**

Cocker spaniel

***Pancreas***

**SEX**

Male, neutered

The left limb and base of the pancreas are prominent in size with minimal deviation from the normal peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated. There is no evidence of peripancreatic effusion.

***Free Abdomen***

**AGE**

11 yrs.

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

**WEIGHT**

29 lbs. .

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings:**

- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- The pancreatic changes are suggestive of chronic pancreatitis with possible age-related remodeling.
- Gallbladder debris, non-mucocele.

**Secondary Findings:**

- Bilateral, non-specific age-related renal changes.

**INTERPRETED BY**

Andrea Nicastro, DVM,  
Diplomate ACVIM  
(*Small Animal Internal  
Medicine*)

**IMAGING  
PERFORMED BY**

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Serial monitoring (i.e., every 3-4 months) of the patient's liver values is recommended. If liver values continue to increase, consider a repeat abdominal ultrasound +/- hepatic tissue sampling.
- Given the pancreatic changes and abnormal pancreatic values, consider transitioning to a prescription low fat diet.

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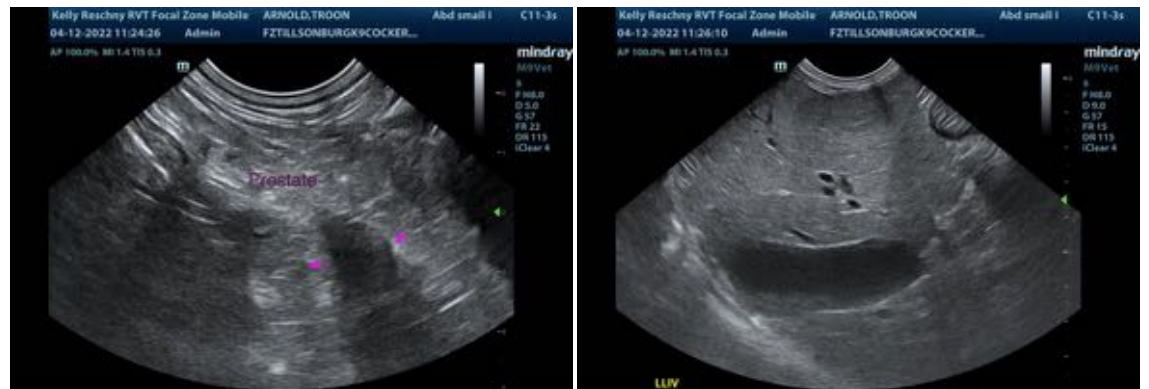
Tilsonburg VC

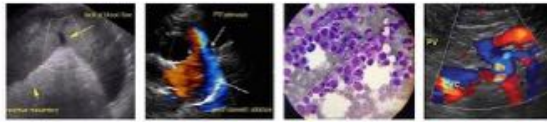
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**PATIENT**

Troon Arnold

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.

**SPECIES**

Canine

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.

**BREED**

Cocker spaniel

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

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**WEIGHT**

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