

**PATIENT PRESENTING CLINICAL SIGNS**

Winston Dickert not eating, V+ x 5 days. Painful abdomen, icteric. Cost concerns, could not transfer to emerg. Currently on IVF, Enrofloxacin, Ampicillin, Cerenia.  
Abnormal PE/Chem/CBC/UA Results: significant increase in liver values ALT >3500, ALP 1357, TBIL 160, GGT 2

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

Lab X

**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

**SEX**

Intact Male

The prostate appears large and hyperechoic, measuring approximately 3.5 cm in height in the sagittal view. The visualized parenchyma appears somewhat heterogeneous. Unfortunately, only the cranial 20-30% of the prostate is visible due to its intrapelvic location.

**AGE**

7 Years

The left kidney has a normal shape and size (6.62 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**WEIGHT**

33.4 kg

The right kidney has a normal shape and size (8.27 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.73 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**IMAGING PERFORMED BY**

Crystal Hill

The right adrenal gland is normal in size measuring 0.93 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**HOSPITAL NAME**

Lynden AC

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**REFERRING VET**

Dr. Abousamra

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

**INVOICE**

36248

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. The cystic and common bile ducts are normal/not visible.

**DATE**

3/16/22



**PATIENT**

**Gastrointestinal**

Winston Dickert

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

**SPECIES**

Canine

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. The duodenum measured as normal (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.)

**BREED**

Lab X

Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

**SEX**

Intact Male

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

**Pancreas**

**AGE**

7 Years

The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

**Free Abdomen**

**WEIGHT**

33.4 kg

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

**Other**

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

Both the left and right testicles are imaged and appear within normal limits.

**ULTRASONOGRAPHIC FINDINGS**

- Heterogeneous liver – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.
- Large, hyperechoic prostate – Unfortunately, only a small amount of the prostate could be visualized, so it is difficult to comment, but symptoms could be consistent with BPH and/or prostatitis. I cannot comment on the presence or absence of an abscess, cyst or mass lesion.

**IMAGING PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Lynden AC

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**REFERRING VET**

Dr. Abousamra

No focal lesions are visualized on the liver, and the gallbladder appears relatively normal. I suspect these findings are most consistent with a diffuse hepatopathy. I suspect a biopsy would be necessary to obtain a definitive diagnosis, but these are also considerations:

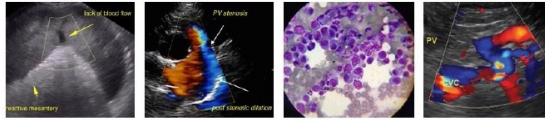
**INVOICE**

36248

- Consider close evaluation of history for possible toxic changes examine medications, diet, dietary indiscretion etc...
- Consider PCR on urine/serum for leptospirosis (if not on antibiotics)/serology if recent antibiotic history
- If not already done, consider pre and post prandial bile acids to evaluate liver function

**DATE**

3/16/22



**PATIENT**

Winston Dickert

- Consider Fine needle aspirate if round cell neoplasia is on your differentia list (25 g needle, normal coags)

**SPECIES**

Canine

- If no response to supportive care (denamarin, fluids, antibiotics,+/- ursodiol etc...) Consider liver biopsy with samples obtained for histopathology, culture, and copper levels.

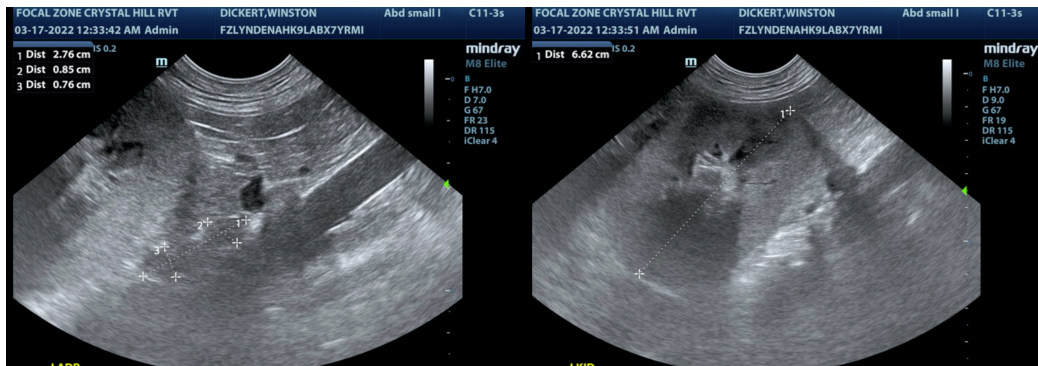
**BREED**

Lab X

Unfortunately, I was unable to fully visualize the prostate due to intrapelvic location. It appeared hyperechoic and large in the cranial 20% visualized. Recommend digital rectal exam +/- radiographs to further evaluate. Recommend urinalysis and culture, and neutering if prostatic disease is suspected.

**SEX**

Intact Male

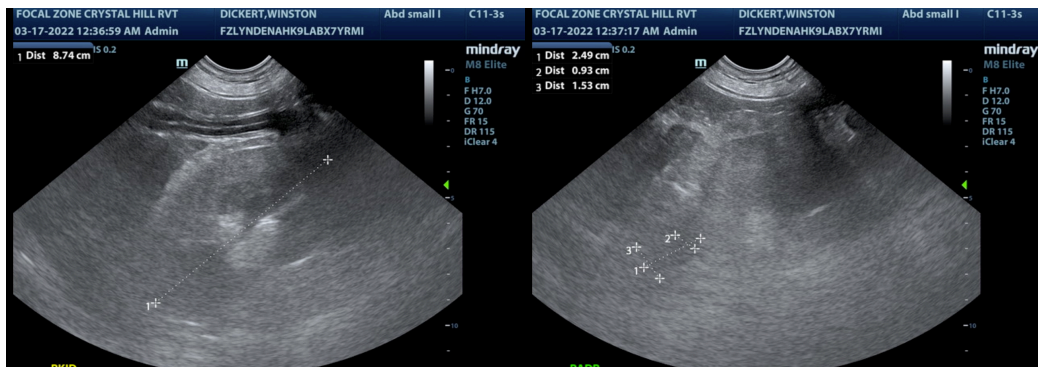


**AGE**

7 Years

**WEIGHT**

33.4 kg

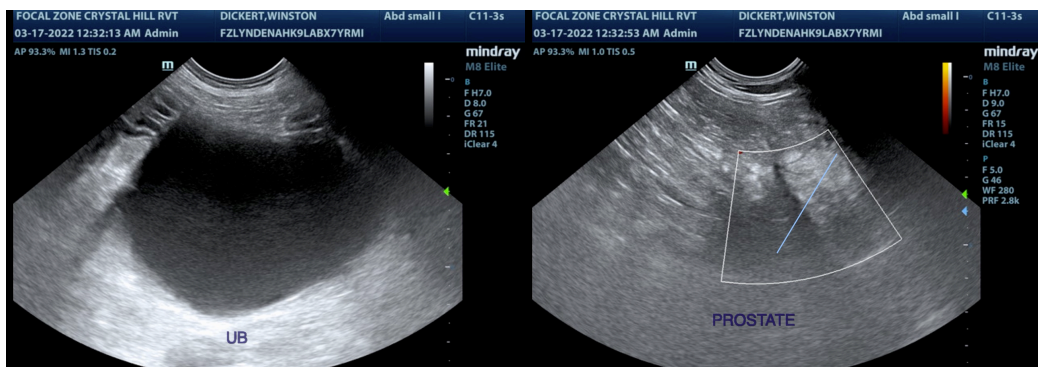


**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING  
PERFORMED BY**

Crystal Hill



**HOSPITAL NAME**

Lynden AC

**REFERRING VET**

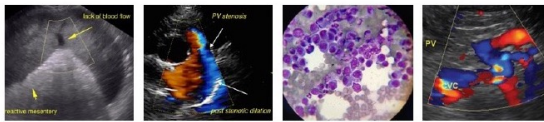
Dr. Abousamra

**INVOICE**

36248

**DATE**

3/16/22



**PATIENT**

Winston Dickert

**SPECIES**

Canine

**BREED**

Lab X

**SEX**

Intact Male

**AGE**

7 Years

**WEIGHT**

33.4 kg

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING  
PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

Lynden AC

**REFERRING VET**

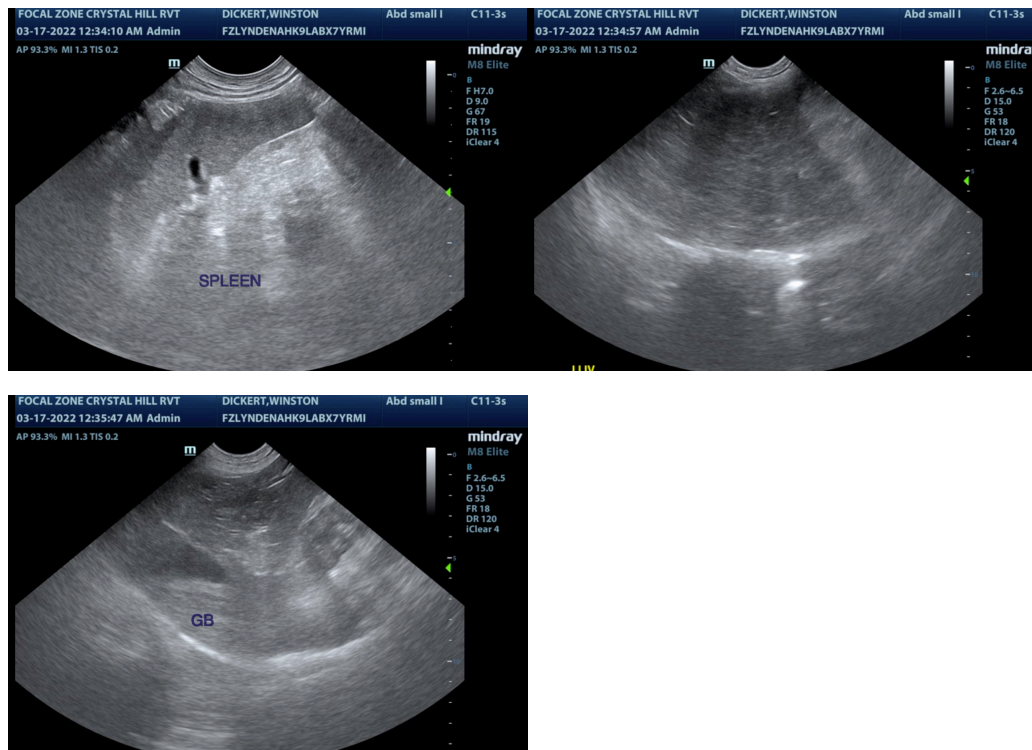
Dr. Abousamra

**INVOICE**

36248

**DATE**

3/16/22



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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)

kathleen.sennello@sonopath.com