



**PATIENT**

Neena Tardiff

**PRESENTING CLINICAL SIGNS**

History: Increasing hunger, Possible emerging Cushing's AUS for evaluation. Sedated for AUS Ace 0.1 mg and Torb 1 mg IV.

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: ALT increased 412 (10-125) ALP increased >2000 (23-212) bilirubin elevated 16 (0-15) T4 and SDMA normal.

**BREED**

Pomeranian

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

*Urinary System*

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is mildly distended. A scant amount of suspended, echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

**SEX**

Female spayed

The left kidney is normal size (4.24 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**AGE**

11 Years 4 months

The right kidney is normal size (4.52 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**WEIGHT**

7.25 kgs.

*Adrenal Glands*

The left adrenal gland is mildly enlarged (0.58 cm at cranial pole) (0.62 cm at caudal pole) (1.69 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.

**INTERPRETED BY**

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

The right adrenal gland is mildly enlarged (0.50 cm at cranial pole) (0.58 cm at caudal pole) (1.85 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**

Dr. Barnes

*Spleen*

The spleen is normal in size (1.10 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.

**HOSPITAL NAME**

Westview Veterinary  
Hospital

*Liver*

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion. The gall bladder is distended. The wall is normal in thickness. A large amount of aggregated, echogenic, suspended sludge in a stellate pattern is observed within the lumen. The cystic and common bile ducts are normal/not seen.

**REFERRING VET**

Dr. Barnes

**INVOICE**

11727kk

**DATE**

8/30/21



**PATIENT**

***Gastrointestinal***

Neena Tardiff

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. 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.

**SPECIES**

Canine

***Pancreas***

**BREED**

Pomeranian

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

**SEX**

Female spayed

***Free Abdomen***

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

**AGE**

11 Years 4 months

**ULTRASONOGRAPHIC FINDINGS**

**Primary Findings:**

- The gall bladder changes are consistent with a fully formed mucocele.
- 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.
- Mild, bilateral adrenomegaly.

**WEIGHT**

7.25 kgs.

**Secondary Findings:**

- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis, or chronic pancreatitis.
- Minor, bilateral, age-related renal changes.

**INTERPRETED BY**

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

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

1. Regarding the gall bladder changes, if an aggressive approach is desired, consider a prophylactic cholecystectomy with submission of the gall bladder as well as a hepatic tissue sample for histopathology.
2. If a more conservative approach is desired, Ursodeoxycholic acid (Ursodiol) at 10-15 mg/kg once a day is recommended. Serial sonographic monitoring (e.g., every 4-6 weeks) of the gall bladder is recommended to assess for progression to a fully-formed mucocele.
3. Three-view thoracic radiographs are recommended prior to any anesthetic event.

**IMAGING PERFORMED BY**

Dr. Barnes

**HOSPITAL NAME**

Westview Veterinary  
Hospital

**REFERRING VET**

Dr. Barnes

**INVOICE**

11727kk

**DATE**

8/30/21



**PATIENT**

Neena Tardiff

**SPECIES**

Canine

**BREED**

Pomeranian

**SEX**

Female spayed

**AGE**

11 Years 4 months

**WEIGHT**

7.25 kgs.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Barnes

**HOSPITAL NAME**

Westview Veterinary  
Hospital

**REFERRING VET**

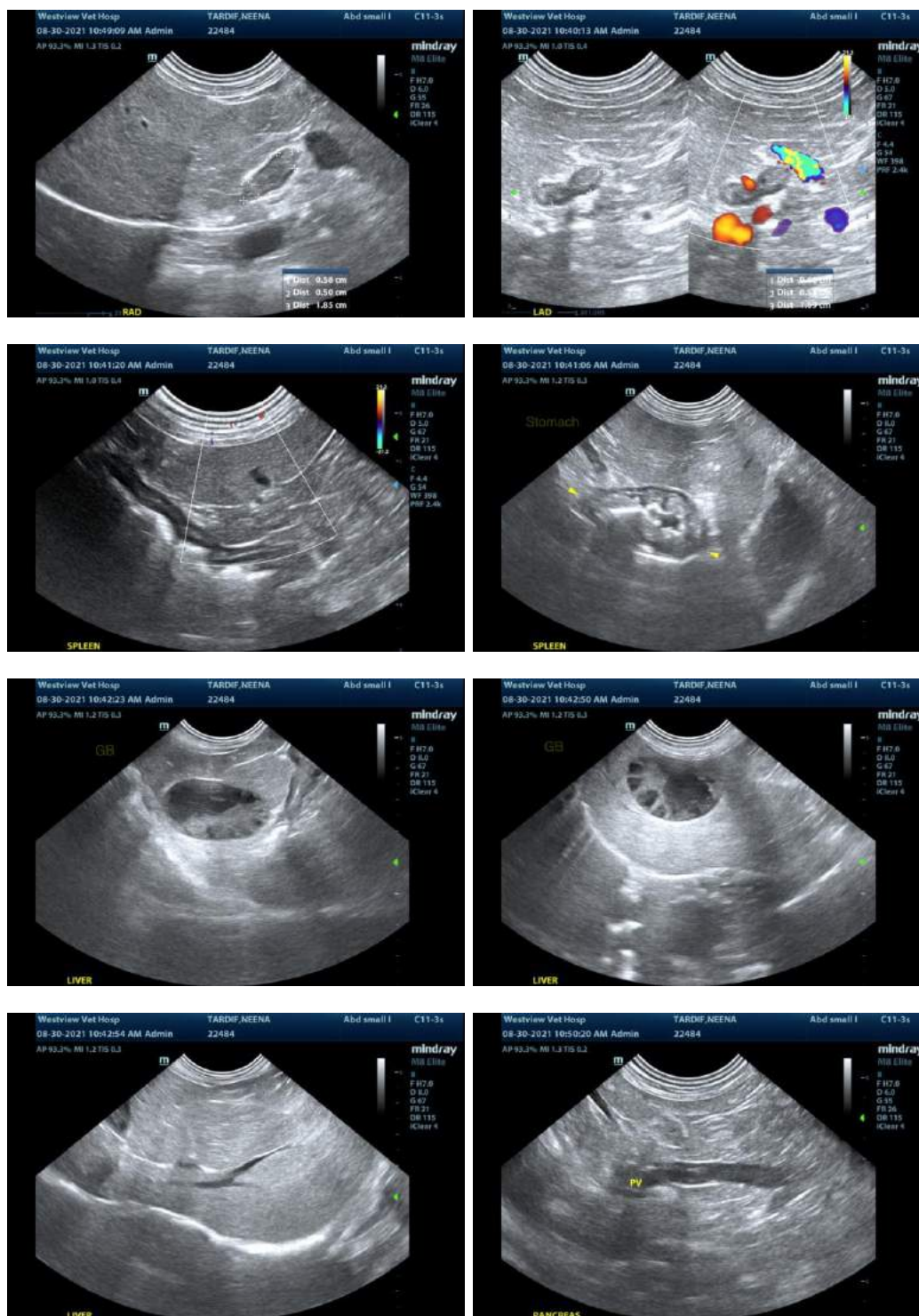
Dr. Barnes

**INVOICE**

11727kk

**DATE**

8/30/21



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.



**PATIENT**

Neena Tardiff

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

Andrea.nicastro@sonopath.com

**SPECIES**

Canine

**BREED**

Pomeranian

**SEX**

Female spayed

**AGE**

11 Years 4 months

**WEIGHT**

7.25 kgs.

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Dr. Barnes

**HOSPITAL NAME**

Westview Veterinary  
Hospital

**REFERRING VET**

Dr. Barnes

**INVOICE**

11727kk

**DATE**

8/30/21