

**PATIENT PRESENTING CLINICAL SIGNS**

Laila Nasok

History: presented for hind end weakness/ falling over starting yesterday evening - she was not interested in food today, which is very unusual for her - history of mitral valve insufficiency with a cardiac ultrasound was performed previously, although no cardiac murmur heard today. Rdmv notes also indicate indiscernible heart murmur - Patient is on pimobendan 1.25 mg PO BID - history of elevated SDMA in the past and chronic vomiting - Laila has been drinking more than normal today - Inappropriate urination in the household is an on-going issue with her, although it occurs infrequently now as the owner takes her for bathroom breaks q2h intervals. Owner takes her out every 2 hours - Patient is QAR on physical exam with normal TPR, BCS 5/9, lenticular opacification OU. No cardiac murmur heard today although regularly irregular rhythm present, coinciding with phase of respiration. She is ambulatory x 4, Grade I medially luxating patella of left knee, pelvic hip sway, stilted hind limb gait, arched kyphotic stance. currently on: Pimobendan 1.25 mg (previously prescribed), Methadone 0.2 mg/kg IV, Cerenia 1 mg/kg SQ, Pantoprazole 1 mg/kg IV

Abnormal PE/Chem/CBC/UA Results: - ECG (in house): normal QRS complexes with sinus arrhythmia identified - Imaging (thoracic/spinal/orthopaedic radiographs): see attached images - Bloodwork : Marked hemocentration (Hct 76.6%), lymphopenia, azotemia (SDMA 36; RI 0-14, Creatinine 191 RI 44-159), Urea 26.4 RI 2.5-9.6), 4Dx negative - Urinalysis: isosthenuria (USG 1.012), pH 5.0, WBC and RBC WNL, no evidence of glucosuria or proteinuria. Sedivue images raise concern for bacteruria - Urine culture: pending rads: cardiac size and silhouette is normal. The pulmonary vessels appear normal. There is no evidence on the one lateral chest projection of pulmonary metastatic disease. There is a mild bronchointerstitial pattern throughout the lungs. There is decreased serosal detail in the cranial abdomen with a gas pattern throughout the GI tract. No radioopaque foreign body or obstructive pattern is seen. There is evidence of degenerative joint disease in the coxofemoral joints

**SPECIES**

Canine

**BREED**

Pekapoo

**SEX**

Female, spayed

**AGE**

14 Yrs.

**WEIGHT**

4.48 kg

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

*Urinary System*

**INTERPRETED BY**

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

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended. A scant amount of echogenic debris is suspended 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.

The left kidney is normal in size (3.38 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few small nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

**IMAGING PERFORMED BY**

Kelly Reshny, RVT

The right kidney is normal size (3.44 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. A few linear areas of mineralization are also observed along the corticomedullary junction. A few small nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

**HOSPITAL NAME**

Hamilton Region  
Veterinary Emergency  
Clinic

**REFERRING VET**

Dr. Gallienne

*Adrenal Glands*

The left adrenal gland is normal size (0.47 cm at cranial pole) (0.48 cm at caudal pole) (1.79 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.

**INVOICE**

11927

The right adrenal gland is normal size (0.94 cm at cranial pole) (0.43 cm at caudal pole) (1.27 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.

**DATE**

8/20/21


**PATIENT**

Laila Nasok

***Spleen***

The spleen is normal in size (1.11 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A small irregular myelolipoma is observed at the hilus. Splenic vasculature is normal. See also *Other*.

**SPECIES**

Canine

***Liver***

The liver is subjectively prominent in size with normal curvilinear peripheral contours. The parenchyma is hyperechoic relative to the spleen and heterogeneous in appearance with a few ill-defined hypoechoic nodules/areas. 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 moderate amount of aggregated echogenic to mineralized partially dependent debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

**BREED**

Pekapoo

**SEX**

Female, spayed

***Gastrointestinal***

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 segmentally dilated with chyme. 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.

**AGE**

14 Yrs.

**WEIGHT**

4.48 kg

***Pancreas***

The region of the pancreas is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

**INTERPRETED BY**

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

***Free Abdomen***

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

***Other***

A 1.27 x 1.16 cm slightly irregular homogeneous nodule is observed in the left cranial quadrant in the region of the cranial aspect of the spleen.

**IMAGING PERFORMED BY**

Kelly Reshny, RVT

**HOSPITAL NAME**

 Hamilton Region  
 Veterinary Emergency  
 Clinic

**ULTRASONOGRAPHIC FINDINGS**

- The origin of the nodule in the left cranial quadrant is unclear but may be arising from spleen, mesentery, pancreas, liver, other. This lesion may represent a granuloma, tumor, accessory splenic tissue, other.
- Bilateral chronic age-related renal changes with dystrophic mineralization and small non-obstructive nephroliths.
- 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.
- Mineralized gallbladder sludge- incidental.

**REFERRING VET**

Dr. Gallienne

**INVOICE**

11927

**DATE**

8/20/21



**PATIENT**

Laila Nasok

\*An obvious cause for the patient's clinical signs is not identified in this study. Considerations include occult neoplasia, underlying orthopedic or neurologic disease, other.

**SPECIES**

Canine

**BREED**

Pekapoo

**SEX**

Female, spayed

**AGE**

14 Yrs.

**WEIGHT**

4.48 kg

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kelly Reshny, RVT

**HOSPITAL NAME**

Hamilton Region  
Veterinary Emergency  
Clinic

**REFERRING VET**

Dr. Gallienne

**INVOICE**

11927

**DATE**

8/20/21

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Consider 2 additional views (VD, other lateral view) of the thorax to complete the cardiopulmonary evaluation. Other diagnostic considerations include the following:
  1. Complete orthopedic and neurologic examinations.
  2. Baseline blood pressure measurement.
  3. T4/free T4 by equilibrium dialysis.
- Depending on the results of the above diagnostics, referral to a board-certified veterinary neurologist may be warranted.
- Also consider fine needle aspiration of the nodule in the left cranial quadrant (if clotting status is appropriate). A 25-gauge needle should be used.





**PATIENT**

Laila Nasok

**SPECIES**

Canine

**BREED**

Pekapoo

**SEX**

Female, spayed

**AGE**

14 Yrs.

**WEIGHT**

4.48 kg

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Kelly Reshny, RVT

**HOSPITAL NAME**

Hamilton Region  
Veterinary Emergency  
Clinic

**REFERRING VET**

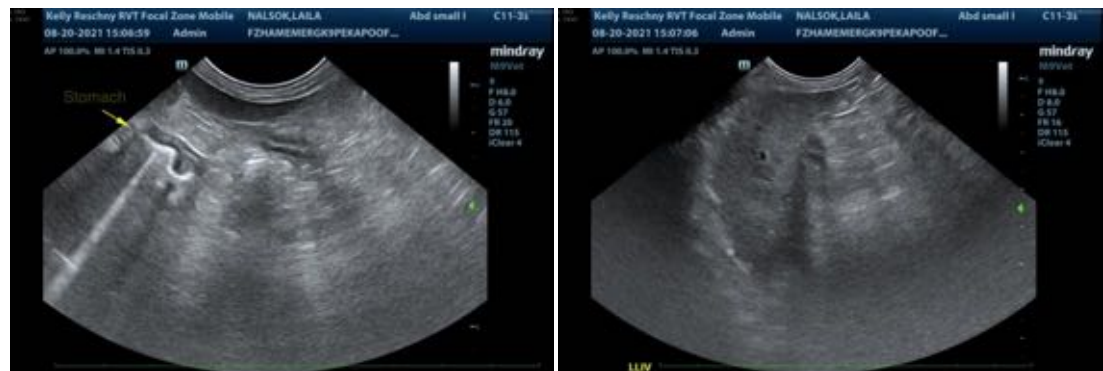
Dr. Gallienne

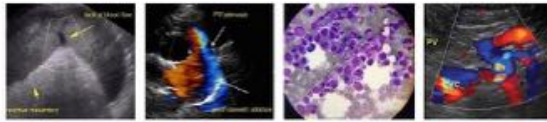
**INVOICE**

11927

**DATE**

8/20/21





**PATIENT**

Laila Nasok

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.

**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.

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

**BREED**

Pekapoo

Andrea.nicastro@sonopath.com

**SEX**

Female, spayed

**AGE**

14 Yrs.

**WEIGHT**

4.48 kg

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Kelly Reshny, RVT

**HOSPITAL NAME**

Hamilton Region  
Veterinary Emergency  
Clinic

**REFERRING VET**

Dr. Gallienne

**INVOICE**

11927

**DATE**

8/20/21