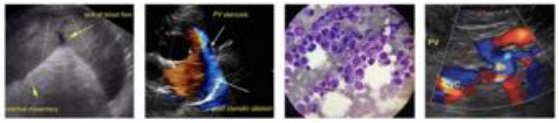


PATIENT

Lucky Nass

SPECIES

Canine

BREED

Beagle

SEX

Spayed Female

AGE

9.24.2019

WEIGHT

13.1 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

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

HOSPITAL NAME

Blue Pearl Mt Pleasant

REFERRING VET

Dr. Ann Marcario

INVOICE

11702

DATE

9.25.22

PRESENTING CLINICAL SIGNS

Clinical Exam Findings: Lucky is a 3y FS Beagle presenting for not eating and lethargy. 3 weeks ago P went from a normal hyper dog to very lethargic. P has stopped eating, increased drinking, shaking when laying down, having a hard time walking, not wanting to use hind limbs, and O has noticed P's incisors are loose. P went to PawMed on the 14th where they treated for IVDD symptoms and ran an NSAID panel with an elevated BUN. They next went to Nemasket Veterinary Clinic where O was told P's Calcium was "off the charts." Today O took P to Flowertown where they did x-rays with nsf and a CBC. O noticed when she took P out of the car to come in today that P was whimpering when she picked P up. P is UTD on VX, HW and flea prevention. Normal urination. No V/D/C/S. On presentation patient is QAR EENT mmbpink ,2 CV/R no murmur/arrhythmia lungs clear abd palp benign UG nsf PLSn wnl integ nsf MS/N ambulatory x4 nonpainful. 3yo FS Beagle with hypercalcemia, azotemia r/o parathyroid disease, renal disease, toxin, immune mediated.

Abnormal lab-work values: Chem 8 BUN 62 creat 3 iCa 2.24 Cortisol 7.9 4DX neg x4 UA USG 1.010, cocci, rods present, blood

Current Medications: Cerenia 1mg/kg IV SID Famotidine 1mg/kg IV BID uansyn 30mg/kg IV Q8H
Radiographic Findings

Report of Imaging Findings: TECHNICAL COMMENTS: Left and right lateral and ventrodorsal radiographs of the abdomen are presented for interpretation. There are three radiographic studies in total. RADIOLOGICAL INTERPRETATION: The liver is slightly enlarged, extending caudally beyond the costal arch. There is slight caudal tilting of the gastric axis. Serosal detail is normal. No specific abnormalities are identified in the region of the spleen, kidneys or urinary bladder. The gastrointestinal tract has normal size and distribution. The skeletal structures on the abdominal images are unremarkable. Assessment: Generalized non-specific hepatomegaly. The significance of this is uncertain. Differentials include normal variation, hyperplasia, extramedullary hematopoiesis, diabetes mellitus, steroid hepatopathy, congestion, inflammation, fatty infiltration, vacuolar hepatopathy and neoplasia. Consider ultrasound examination with fine needle aspiration for cytology, if appropriate. A definitive cause for the patient's presentation is not identified on this study

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

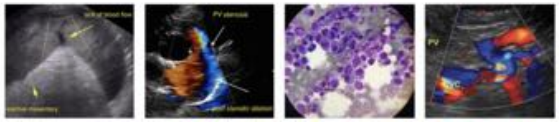
The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The **left kidney** is normal size (6.83 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. The cortex is hyperechoic. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The **right kidney** is normal size (7.61 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. The cortex is hyperechoic. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The **left adrenal gland** is normal size (0.51 cm at cranial pole) (0.63 cm at caudal pole); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex,



PATIENT

Lucky Nass

SPECIES

Canine

BREED

Beagle

SEX

Spayed Female

AGE

9.24.2019

WEIGHT

13.1 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

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

HOSPITAL NAME

Blue Pearl Mt Pleasant

REFERRING VET

Dr. Ann Marcario

INVOICE

11702

DATE

9.25.22

and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The **right adrenal gland** is normal size (1.36 cm at cranial pole) (0.55 cm at caudal pole) (2.07 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.

Spleen

The **spleen** is normal in size (1.66 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 swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely mottled, bordering on a “moth-eaten” appearance. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately 1: 1.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. Luminal contents are anechoic. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

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 is normal to borderline thickened, with retention of the normal layering pattern. There is mild thickening of the submucosal layer in several segments. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

The left limb is visible/prominent with minimal deviation from the normal peripheral contours. The parenchyma is mildly hypoechoic relative to surrounding omental fat. No focal lesions are observed. The pancreatic duct is not overtly dilated.

Free Abdomen

There is no evidence of free fluid. One to two prominent mesenteric **lymph nodes** are visualized, the largest measuring 1.96 cm in length. In addition, a 5.68 x 3.66 cm multiseptated cystic, heterogenous, periportal lymph node is seen.

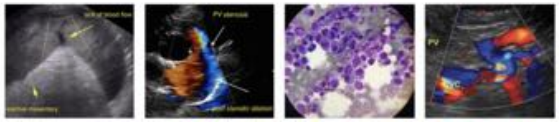
Other

A **brief echocardiogram** reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The hepatic parenchymal changes in conjunction with the hypercalcemia, are most concerning for infiltrative neoplasia (i.e., lymphoma). However, a diffuse inflammatory process or other hepatopathy cannot be completely excluded.
-
- The enlarged abdominal lymph nodes, particularly the periportal node, are more concerning for infiltrative neoplasia although lymphadenopathy or reactive hyperplasia are also possible.
- Chronic renal changes with trace left pyelectasia



PATIENT

Lucky Nass

SPECIES

Canine

BREED

Beagle

SEX

Spayed Female

AGE

9.24.2019

WEIGHT

13.1 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

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

HOSPITAL NAME

Blue Pearl Mt Pleasant

REFERRING VET

Dr. Ann Marcario

INVOICE

11702

DATE

9.25.22

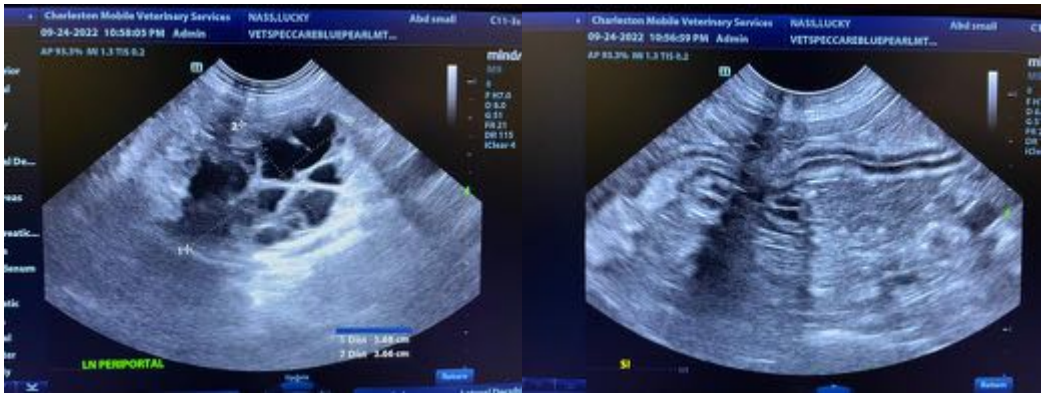
Secondary Findings

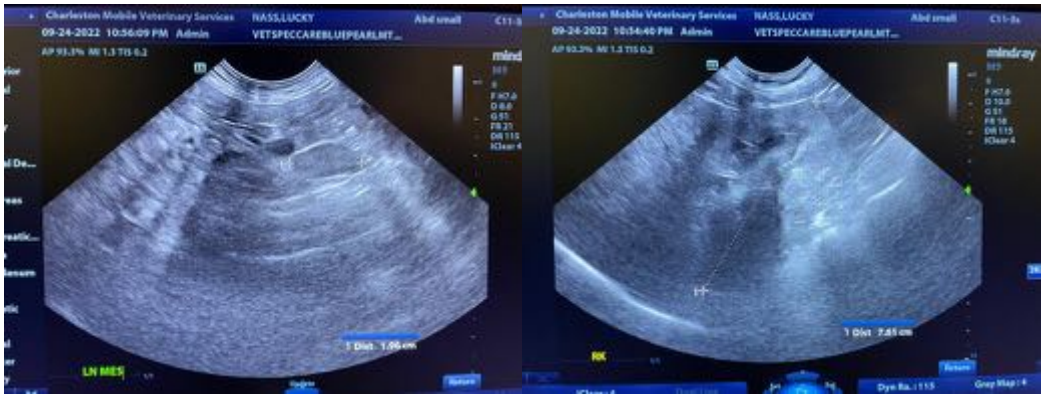
- The pancreatic changes in the left limb may be a normal variant for this patient or may represent mild pancreatitis. Correlation with the patient's clinical history is recommended.
- The bowel wall changes are most consistent with an inflammatory process, with a lower possibility of emerging neoplasia.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

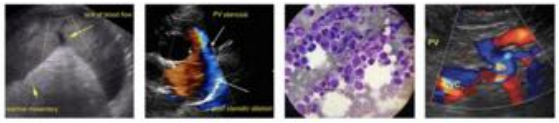
Given the clinical history and sonographic changes, consider the following:

1. Three-view thoracic radiographs to assess for lymphadenopathy in the chest
2. Fine-needle aspirate of the liver, if clotting status is appropriate
3. Ionized calcium +/- PTH/PTHrP
4. Supportive care for renal failure is also recommended, including IV fluid diuresis and symptomatic treatment.
5. Also consider a urine culture and sensitivity, UPC (if proteinuria is present) and baseline blood pressure measurement.





SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



Charleston Mobile Veterinary Services
IMAGING PERFORMED BY
CharlestonMobile.Net 800.403.5408

PATIENT

Lucky Nass

SPECIES

Canine

BREED

Beagle

SEX

Spayed Female

AGE

9.24.2019

WEIGHT

13.1 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

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

HOSPITAL NAME

Blue Pearl Mt Pleasant

REFERRING VET

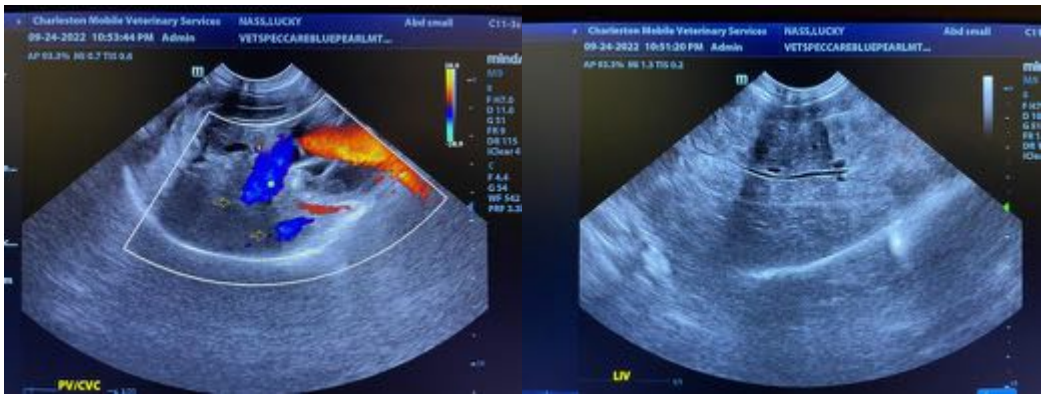
Dr. Ann Marcario

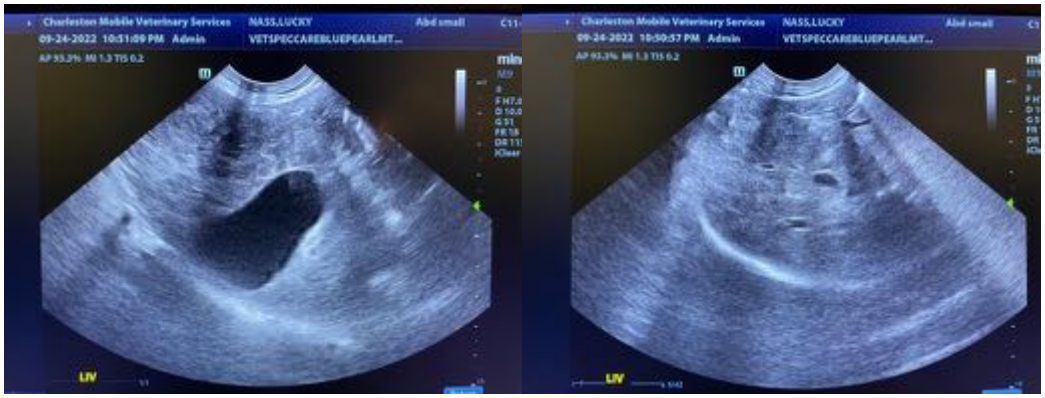
INVOICE

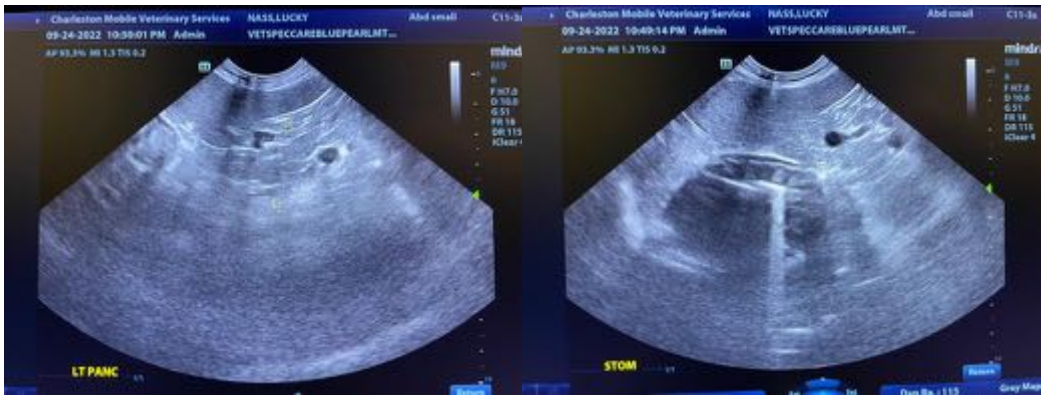
11702

DATE

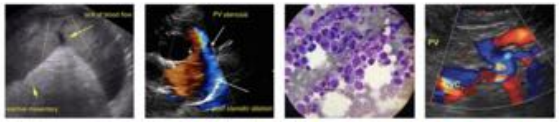
9.25.22







SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



Charleston Mobile Veterinary Services
IMAGING PERFORMED BY
CharlestonMobile.Net 800.403.5408

PATIENT

Lucky Nass

SPECIES

Canine

BREED

Beagle

SEX

Spayed Female

AGE

9.24.2019

WEIGHT

13.1 kg

INTERPRETED BY

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

IMAGING PERFORMED BY

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

HOSPITAL NAME

Blue Pearl Mt Pleasant

REFERRING VET

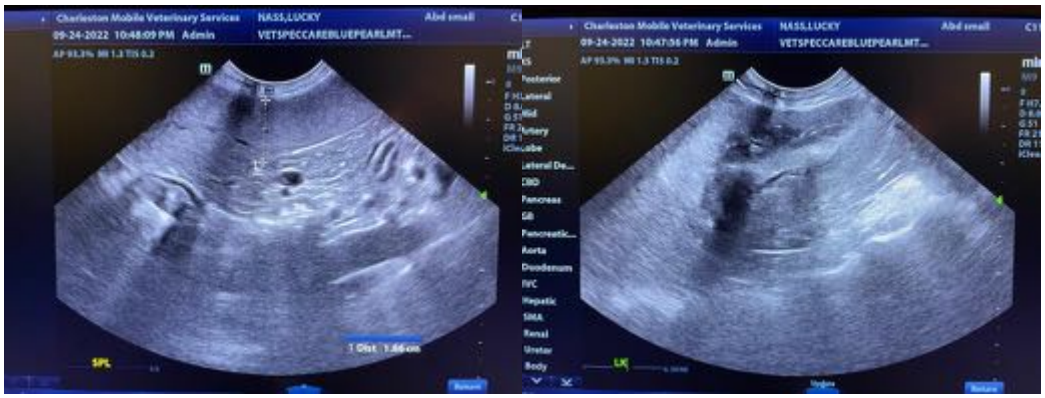
Dr. Ann Marcario

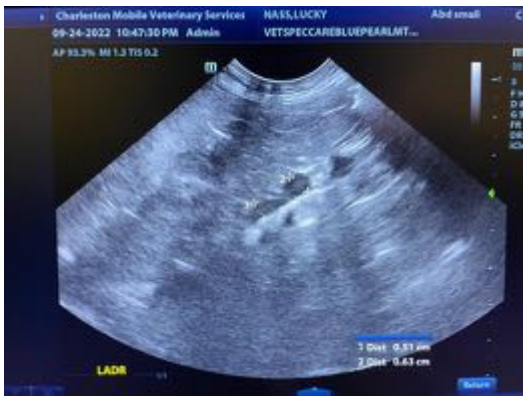
INVOICE

11702

DATE

9.25.22





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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com