**DATE PRESENTING CLINICAL SIGNS**

9.8.2022 7/15/22 profound pups. X-rays showed bladder stones, blood work alt 183, urine sg low at 1008. cystotomy done oxalate crystals; also urine culture coli. still PU/PD internist believes renal in origin

PATIENT

Poncho Kashmer

Current Medications: S/O diet only.
 Date of Previous IntraPet Ultrasound: No previous.
 Sedation: Not required to complete full diagnostic ultrasound.
 Stat Report: Not requested.

SPECIES

Canine

Imaging Performed By: Andi Parkinson, BS, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

Shepherd Mix

Urinary System

The **urinary bladder** is mildly distended. The wall is diffusely thickened (up to 0.76 cm) with an irregular mucosal surface. A scant amount of echogenic debris is suspended within the lumen. No cystic calculi are observed. The region of the trigone is normal.

SEX

Neutered Male

The region of the **prostate** is not visualized due to its pelvic location.

AGE

11/1/201

The **left kidney** is normal size (7.15 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

WEIGHT

63lbs

The **right kidney** is normal size (6.27 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

Adrenal Glands

The **left adrenal gland** is severely enlarged (6.18 x 5.65 cm) and irregular, with a mass effect. The mass is extremely vascular in nature. The lesion invades into the caudal vena cava, which is severely dilated (3.27 cm). The mass within the caval lumen extends cranially almost to the level of the diaphragm.

The **right adrenal gland** is small in size (0.43 cm at cranial pole) (0.44 cm at caudal pole): with a flattened contour; 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, DMV,
 Diplomate DACVIM
 (Small Animal
 Internal Medicine)

HOSPITAL NAME

Belvedere VC

REFERRING VET

Dr. Molinelli

Spleen

The **spleen** is normal in size (1.25 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 normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen. An approximately 3.27 cm isoechoic nodule/mass is observed on the left side. The lesion does not appear to cause capsular expansion. The remaining parenchyma is homogenous. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

INVOICE

11606

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. A small to moderate amount of echogenic debris and mineralized sand is observed within the lumen, some of which is gravity dependent, and some of which is suspended. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The **gastric lumen** is gas-distended. The gastric wall is normal in thickness with a normal layering pattern. 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. There is no evidence of an obstructive pattern.

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.

Free Abdomen

There is no obvious evidence of free fluid. A 3.18 x 1.15 cm cystic lymph **node** is observed in the left midabdomen.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Large left adrenal mass with extensive caudal vena cava invasion. Neoplasia (i.e., adenocarcinoma, pheochromocytoma) is suspected.
- The small right adrenal gland is likely due to atrophy, secondary to a left functional adrenal tumor.
- The prominent cystic lymph node in the left midabdominal may represent reactive change or infiltrative neoplasia.

Secondary Findings

- The urinary bladder wall changes are most consistent with cystitis with a lower possibility of emerging neoplasia.
- Bilateral degenerative renal changes
- The left hepatic nodule could be consistent with a benign process (i.e., nodular hyperplasia, adenoma). Alternatively, an emerging neoplastic process cannot be excluded.

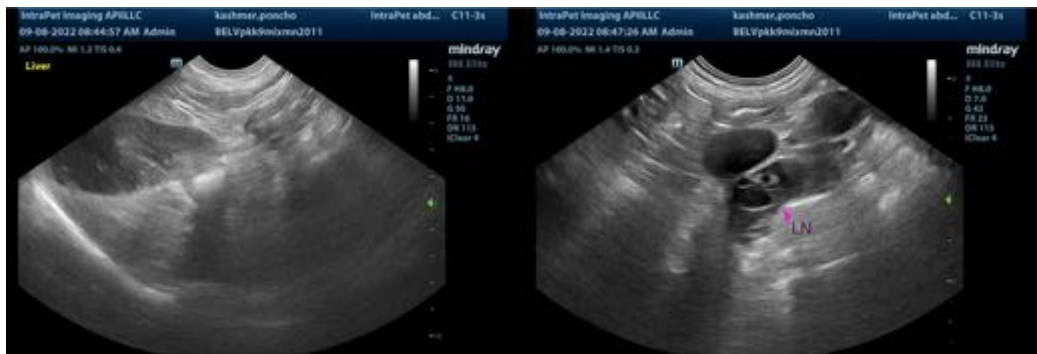
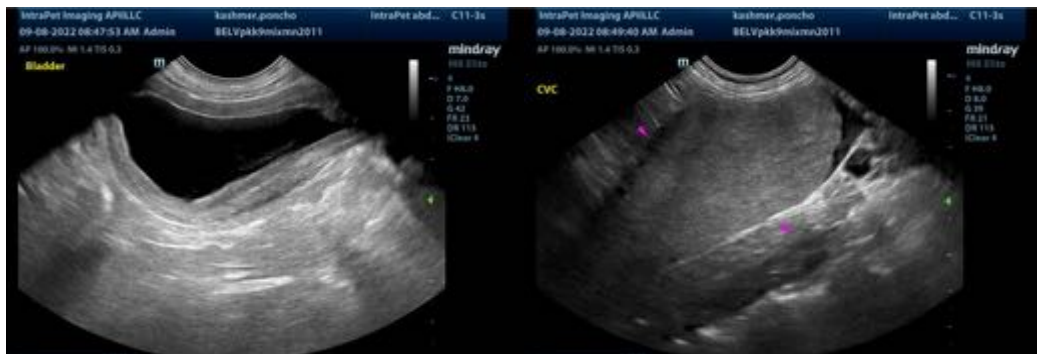
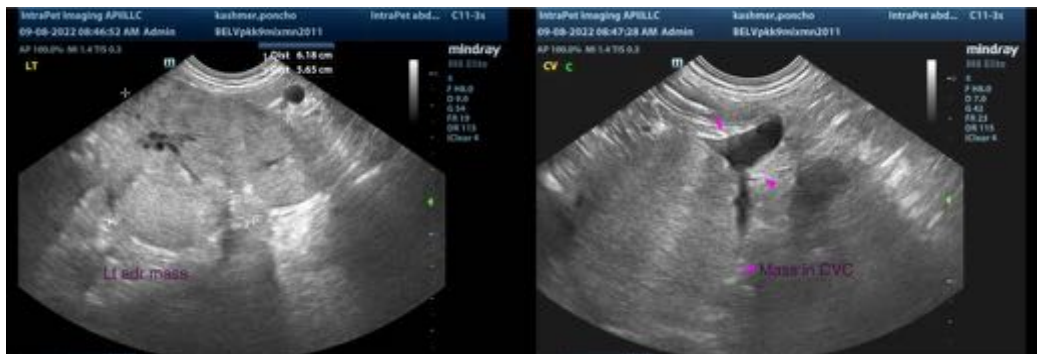
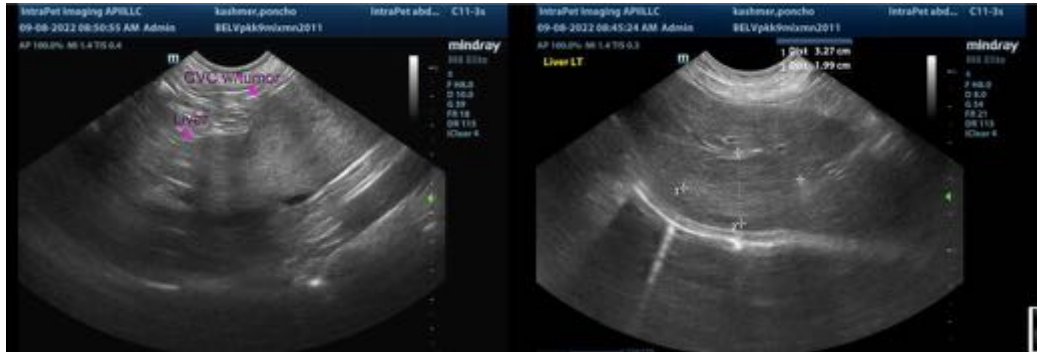
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Thoracic radiographs can be considered to assess for pulmonary metastatic disease.

Due to the size and invasiveness of the left adrenal mass, surgical resection is considered unlikely, and palliative care should be considered. However, consider consultation with a board-certified surgeon to discuss options.

A baseline blood pressure measurement should be obtained to evaluate for hypertension.

Also consider a repeat urine culture and sensitivity to assess for persistent infection.





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