IMAGING PERFORMED BY

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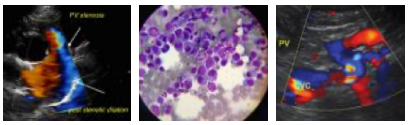

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DATE
1/17/2022

PATIENT
Lady Paugh

SPECIES
Canine

BREED
West Highland Terrier

SEX
Female, spayed

AGE
5/21/2011

WEIGHT
19.7 lbs.

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

HOSPITAL NAME
Essex Middle River VH

REFERRING VET
Dr. Beizavi

INVOICE
12852

PRESENTING CLINICAL SIGNS

History: History of polyuria by owner. Bladder wall lesion seen on ultrasound during routine cysto.

Lab Results: hematuria and very dilute urine (1.005). CBC chem WNL. No proteinuria. Normal T4. 4DX shows Lyme + results. Fecal negative for ova and Giardia.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is minimally distended. The wall is severely and diffusely thickened (up to 0.96 cm) and irregular. The outer wall layer is hypoechoic/edematous. The wall is vascular with pinpoint hyperechoic to mineralized foci. No cystic calculi are observed. The region of the trigone/cystourethral junction is thickened with a mass effect. The proximal urethra is also diffusely thickened (0.58 cm) with foci of mineralization within the urethral walls. The proximal urethral lumen is not dilated.

The left kidney is normal size (4.68 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Mild pyelectasia is present (0.22 cm in the longitudinal plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (5.01 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Trace pyelectasia is present (0.14 cm in the longitudinal plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is borderline enlarged (0.51 cm at cranial pole) (0.61 cm at caudal pole) (1.65 cm in length) with a slightly irregular shape. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.79 cm at cranial pole) (0.42 cm at caudal pole) (2.02 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 (1.25 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. No focal lesions are observed. Splenic vasculature is normal.

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 lumen is moderately distended. The wall is thin and smooth. A small amount of aggregated echogenic mostly gravity-dependent debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

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 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.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely hyperechoic 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.

Free Abdomen

There is no evidence of free fluid. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The urinary bladder wall and proximal urethral changes are most consistent with infiltrative neoplasia (i.e., transitional cell carcinoma) with a low possibility of a severe inflammatory process (i.e., polypoid cystitis).

Secondary Findings:

- Non-specific benign geriatric changes in the kidneys, liver and pancreas.
- The splenic parenchymal changes are most likely benign in nature (i.e., lymphoid hyperplasia or extramedullary hematopoiesis). Emerging neoplasia is possible but considered unlikely.

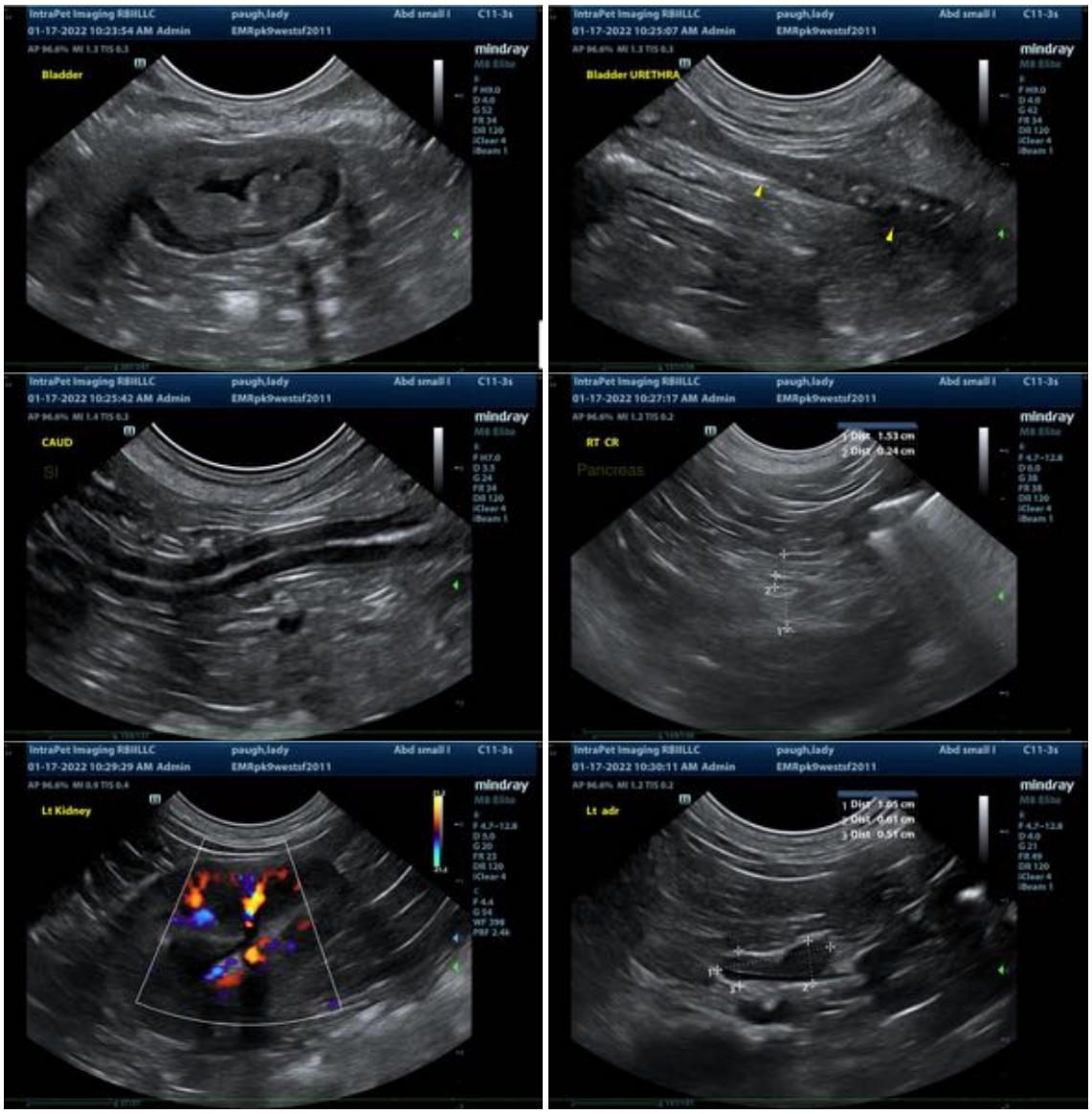
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

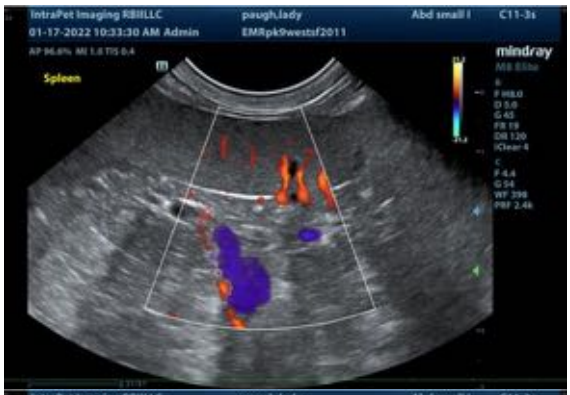
- A urine BRAF test is recommended to further evaluate for transitional cell carcinoma. If results are inconclusive and an aggressive approach is desired, a surgical bladder wall biopsy may be necessary to get a definitive diagnosis.
- Consider consultation with a board-certified veterinary oncologist if neoplasia is confirmed. Otherwise, palliative care can be considered. See below:

    1. Piroxicam at 0.3 mg/kg PO every 24 hours (may need to be compounded in smaller patients)
    2. Misoprostol (stomach protectant) at 2 mcg/kg PO every 12 hours.

3. Baseline renal values should be performed then repeated every 4 weeks to monitor for nephrotoxicity

- Three-view thoracic radiographs are recommended to assess for pulmonary metastatic disease.

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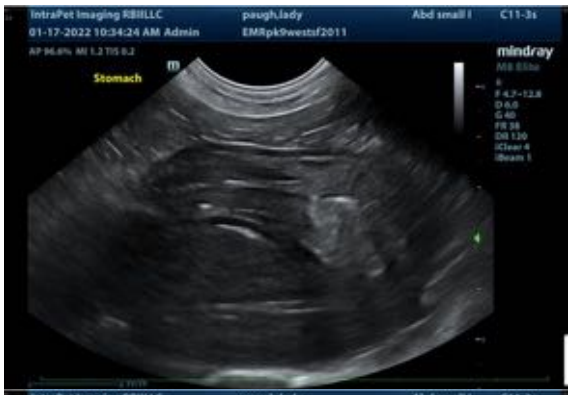
Spleen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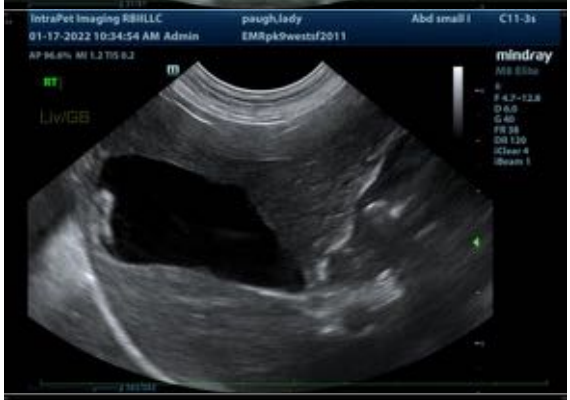
Stomach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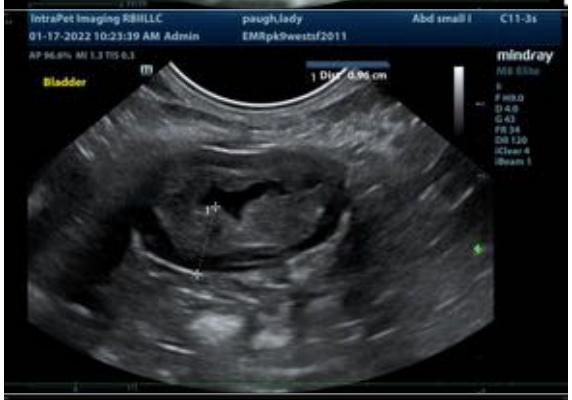
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Abd small I
C11-3s
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Bladder
1 Dist 0.96 cm


IntraPet Imaging RBIILLC
paugh,lady
linear ab
L14-6Ns
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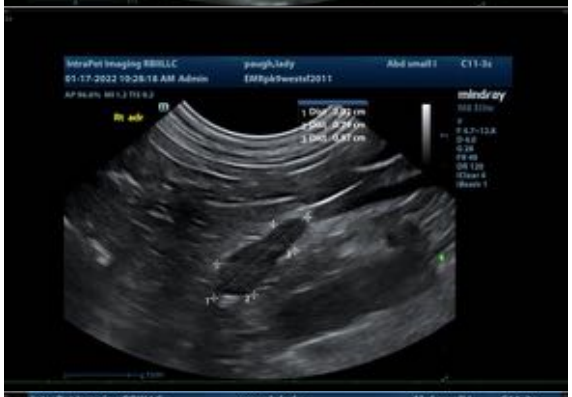
mindray
BLADDER
TRIGONE
1 Dist 0.81 cm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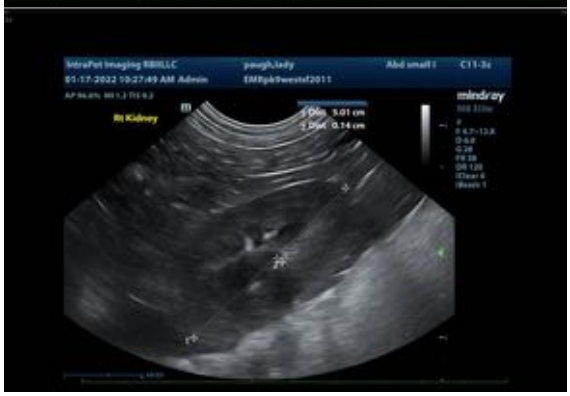
mindray
Rt adr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paugh,lady
Abd small I
C11-3s
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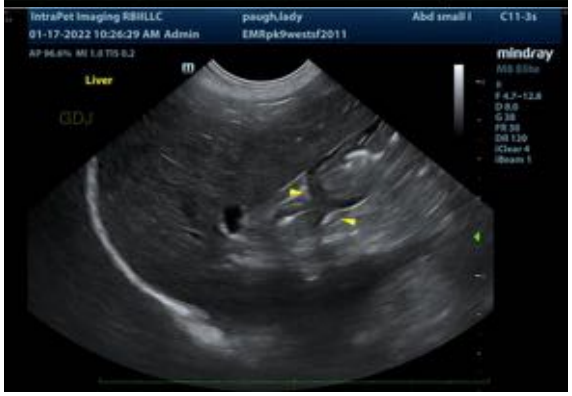
EMRpk9westsf2011
mindray
Rt Kidney
1 Dist 5.01 cm
1 Dist 0.14 cm


IntraPet Imaging RBIILLC
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C11-3s
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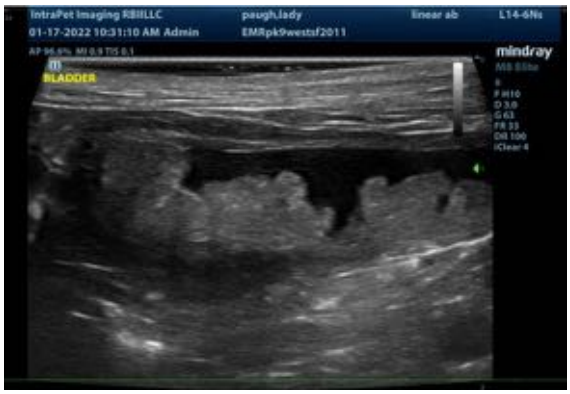
EMRpk9westsf2011
mindray
Liver
GBJ



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.

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)
Andrea.nicastro@sonopath.com