



PATIENT PRESENTING CLINICAL SIGNS

Kenzie Handford History: Frequent urination, smelly. Owner reports that she strains more when she urinates. No apparent discoloration.

SPECIES Abnormal PE/Chem/CBC/UA Results: Palpable bladder mass, apparently non-painful. Afebrile. CBC, GHP and voided UA pending.

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED *Urinary System*

Scottish Terrier

The **urinary bladder** is moderately distended with anechoic urine. A >3.50 cm irregular vascular mass with focus of mineralization is extending from the apex to the region of the trigone. No cystic calculi are observed. The proximal urethra is mildly thickened (up to 0.45 cm in diameter).

SEX

Spayed Female

The **left kidney** is normal in size (4.89 cm in length) with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Trace pyelectasia is present (0.17 cm in the longitudinal plane). There is suspected dilation of the proximal ureter (0.35 cm in diameter). There is no evidence of infarcts or hydronephrosis. Renal vasculature is normal.

AGE

10 years

The **right kidney** is subjectively normal in size with a normal shape, smooth peripheral margins, and normal internal architecture. There is mild to moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

WEIGHT

20.8 lbs

Adrenal Glands

The **left adrenal gland** is normal size (0.43 cm at cranial pole) (0.51 cm at caudal pole): 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 not definitively visualized in the available images.

IMAGING PERFORMED BY

Harold Mike Beard

Spleen

The **spleen** is normal in size (1.56 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

Animal Care VC

Liver

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is hypoechoic 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.

REFERRING VET

Dr. Harold Mike
Beard

Gall bladder

(No images provided)

Gastrointestinal

The **gastric lumen** is mildly to moderately distended with ingesta. The gastric wall is normal in thickness with a normal layering pattern. 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. There is no evidence of an obstructive pattern.

INVOICE

11165

DATE

6.28.22

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

Retroperitoneal fluid is suspected adjacent to the urinary bladder. There is no evidence of inflammation or effusion. The abdominal **lymph nodes** are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Large urinary bladder wall mass with extension into the trigone +/- proximal urethra. Neoplasia (i.e., transitional cell carcinoma) is considered likely with a low possibility of a benign pathology (i.e., inflammatory disease).
- Bilateral, chronic, age-related renal changes. There is suspected left hydronephrosis, likely secondary to obstruction of the distal aspect due to the bladder wall mass.
- The suspected trace retroperitoneal fluid is likely secondary to urinary bladder pathology.

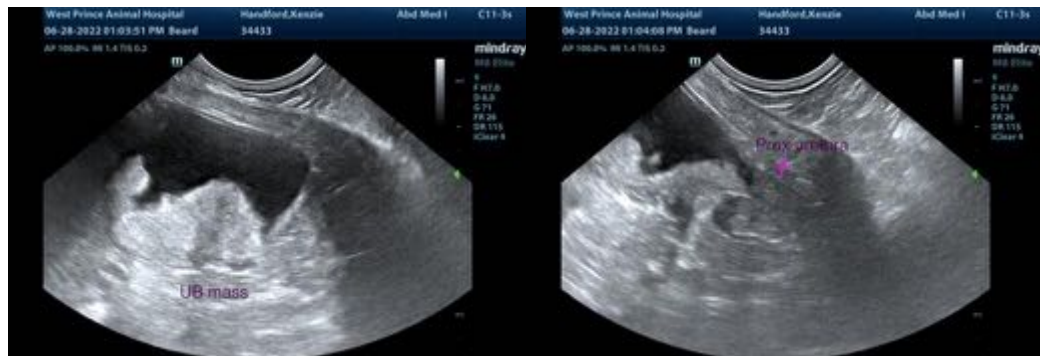
Secondary Findings

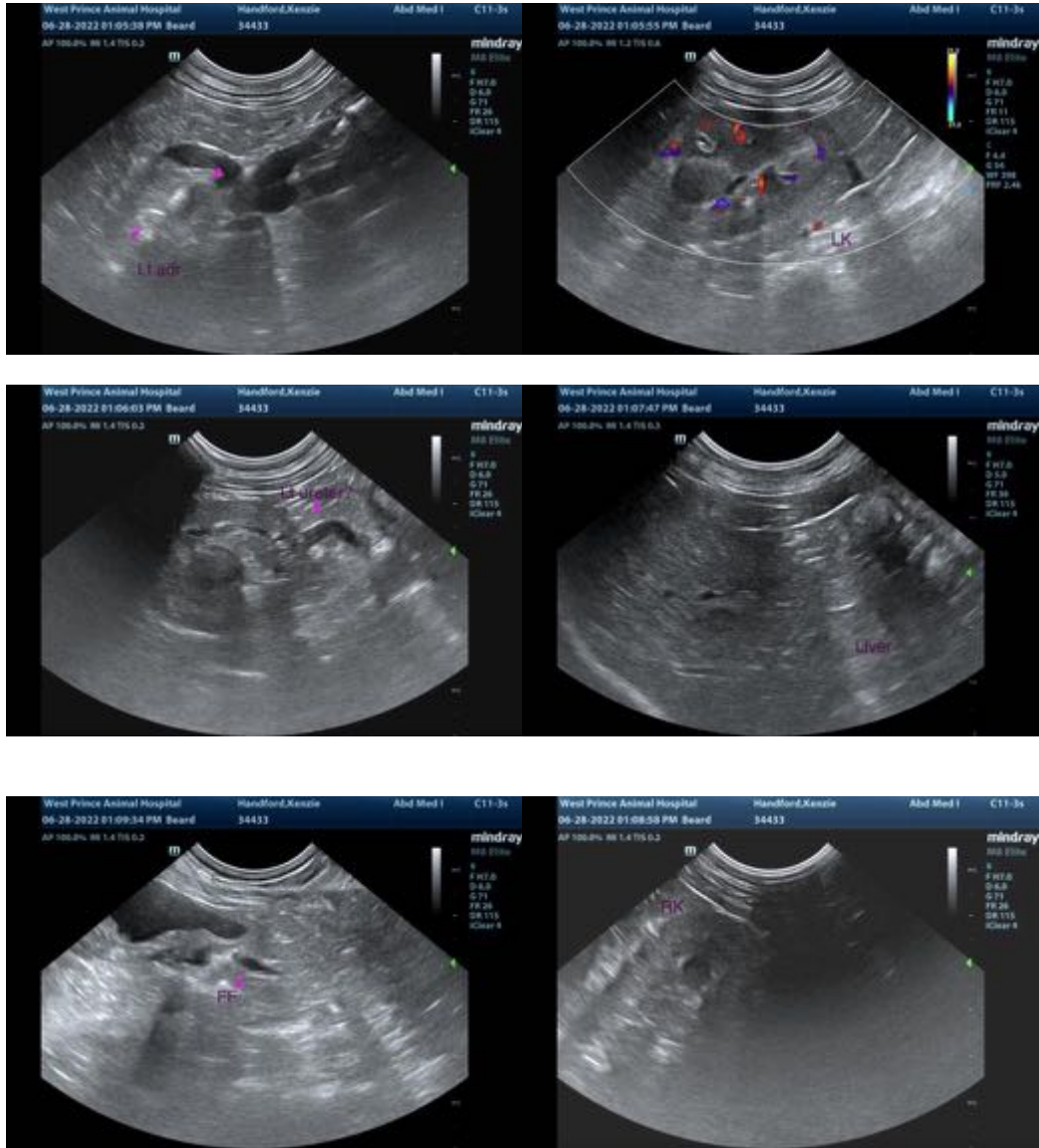
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely. However, correlation with the patient's liver values is recommended.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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

Consider a urine BRAF test to further confirm lower urinary tract neoplasia. It should be noted, however, that a negative BRAF test does not exclude the possibility of cancer. Therefore, if a negative result is obtained, a urinary bladder wall biopsy may be necessary to get a definitive diagnosis.





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.

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