**DATE PRESENTING CLINICAL SIGNS**

8/18/23

Dysuria with persistent pyuria/hematuria with negative culture. Also, hx of seizures (recent) and chronic CCL rupture.

**PATIENT**

Sophie Hunter

Current Medications: UTI treated w/ cefpodoxime, enrofloxacin. On zonisamide, gabapentin and as needed carprofen.

Lab Results: CBC and chem WNL, UA's - high WBC, RBC's, neg culture.

Date of Previous IntraPet Ultrasound: No previous.

**SPECIES**

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

**BREED**

Mini Aussie

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Spayed Female

**Urinary System**

The urinary bladder is mildly distended with anechoic urine. There is a large irregular partially mineralized mass effect visualized in the distal trigone/urethra which appears to be significantly including the lumen. This measures approximately 1.34 cm in cross section and extends for over 4.6 cm in length. There is evidence of a dilated ureter adjacent to the mass effect most consistent with a distal left ureter. The body of the urinary bladder appears normal, but evaluation is somewhat hindered by lack of urine distention.

Findings most consistent with a urethral mass lesion.

**AGE**

8/7/2010

**WEIGHT**

30 lbs.

The left kidney has a normal shape and size (5.04 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex: medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney has a normal shape and size (5.04 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex: medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.66 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.45 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

**INTERPRETED BY**

Kathleen Sennello  
DVM, MS, Diplomate  
ACVIM (Small Animal  
Internal Medicine)

**HOSPITAL NAME**

Hickory Veterinary  
Hospital

**REFERRING VET**

Dr. Synder

**INVOICE**

10430

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

### ***Gastrointestinal***

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis: mucosa layer ratio. The jejunum measured as normal (0.25 cm) Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

### ***Pancreas***

The pancreas is prominent and mottled compared to the surrounding isoechoic mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

### ***Free Abdomen***

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

## **PRIMARY FINDINGS**

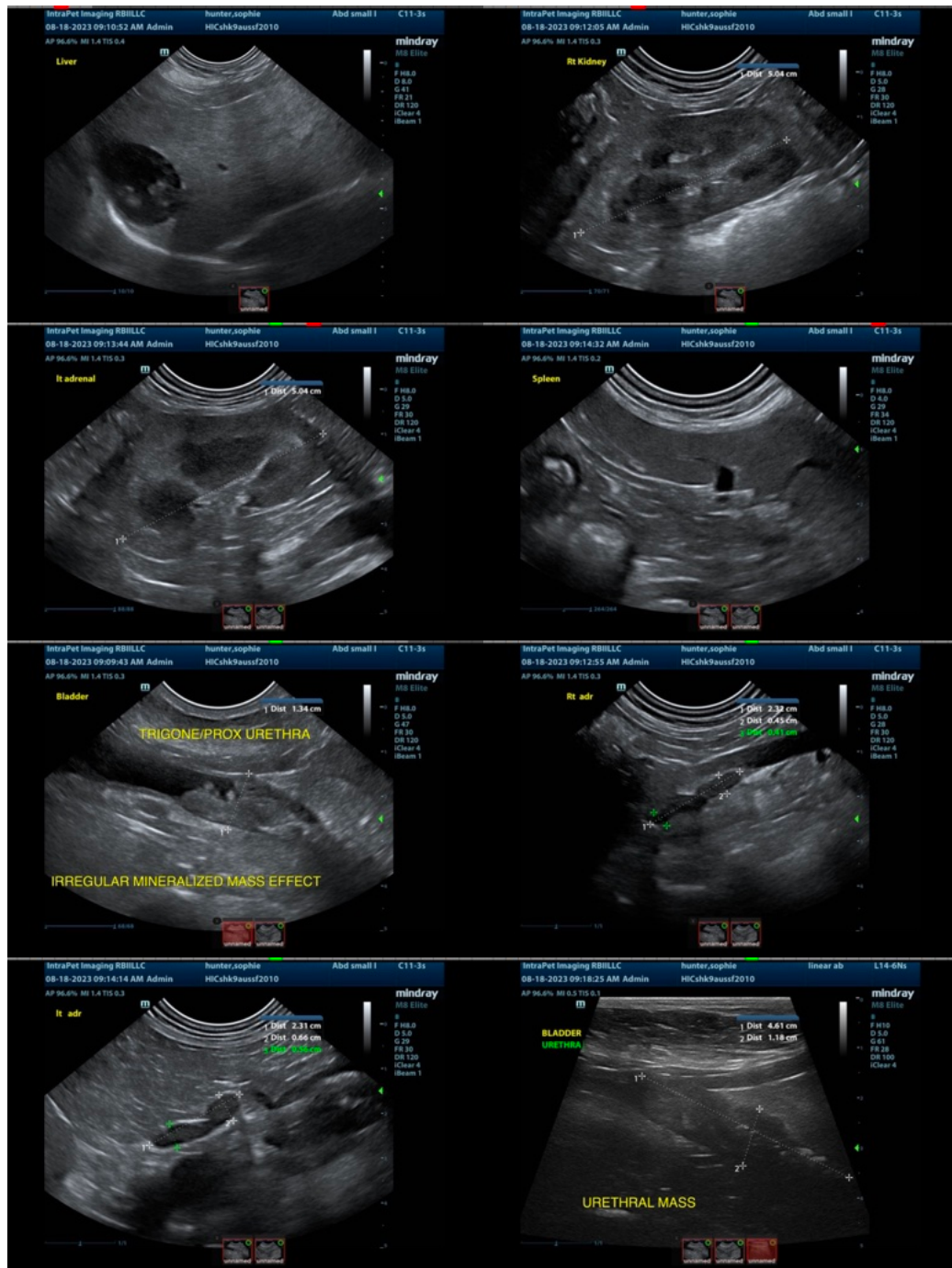
- Irregular heterogenous/partially mineralized mass effect visualized in the distal trigone/urethra. Findings are most consistent with a urethral mass. Primary differential would be a transitional cell carcinoma. Although other differentials (granulomatous urethritis) etc. are possible.
- Prominent mottled pancreas. The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis, or chronic pancreatitis.
- Moderate gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is a large amount of irregular partially mineralized tissue visualized within the lumen of the urethra and the distal trigone. Additionally, the left distal ureter appears somewhat dilated and prominent. Most consistent with a partial obstruction. These findings are most consistent with a transitional cell carcinoma of the urethra, but other differentials are possible. Consider a traumatic catheterization to obtain cells for cytologic analysis. If a free catch urine sample is highly cellular, sometimes cytology could be performed on this sample foregoing the catheterization. If a cytologic evaluation is not possible or is not diagnostic, consider a urine BRAF test. A positive urine BRAF test would be strongly supportive of a transitional cell carcinoma. A negative urine BRAF test is non diagnostic and would require additional evaluation.

If a cytologic diagnosis can be obtained recommended a consultation with a veterinary oncologist regarding treatment options and prognosis, as risk for urinary obstruction is high in this individual.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





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.

Kathleen Sennello DVM, MS, Diplomate ACVIM (Small animal Internal Medicine)  
info@sonopath.com