



**PATIENT PRESENTING CLINICAL SIGNS**

Harry Spivack  
History: urinary incontinence  
ALP 190 USG 1.005 3+ protein, 3+ blood negative urine culture

**SPECIES**

Canine

**BREED**

West Highland White  
Terrier

**SEX**

Neutered male

**AGE**

16 years

**WEIGHT**

19.8 lbs

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The bladder wall is diffusely irregular and thickened with a focal, partially mineralized, irregular mass effect. The visible and ventral aspect of the urinary bladder measured 2.52 x 2.42 cm. There is no evidence of ureteral obstruction at the trigone, but there is evidence of additional mild, focal thickening/mass lesions at the cystourethral junction. No cystic calculi are visualized.

The prostate is normal at 1.3 cm.

The left kidney has a normal shape and size (4.7 cm) with a cortical cyst that measured 0.32 cm. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.6 cm). Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.57 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 0.6 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.

**IMAGING PERFORMED BY**

Dr. Scott

**HOSPITAL NAME**

HoHoKus VH

**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.

**REFERRING VET**

Dr. Eisenberg

**Liver**

**INVOICE**

92320

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. The gallbladder lumen is moderately distended. The wall of the gallbladder has irregular polypoid projections and there is a

**DATE**

10/12/21



<b>PATIENT</b>	is a moderate amount of non-organized echogenic debris. The gallbladder wall measured 0.21 cm. The cystic and common bile ducts are normal/not visible.
Harry Spivack	
<b>SPECIES</b>	<b>Gastrointestinal</b>
Canine	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.
<b>BREED</b>	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 duodenum measured as normal (0.43 cm) and the jejunum measured as normal (0.31 cm). Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.
West Highland White Terrier	
<b>SEX</b>	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.
Neutered male	
<b>AGE</b>	
16 years	
<b>WEIGHT</b>	<b>Pancreas</b>
19.8 lbs	The pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.
<b>INTERPRETED BY</b>	<b>Free Abdomen</b>
Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)	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.
<b>IMAGING PERFORMED BY</b>	<b>ULTRASONOGRAPHIC FINDINGS</b>
Dr. Scott	<b>PRIMARY FINDINGS:</b>
<b>HOSPITAL NAME</b>	<ul style="list-style-type: none"> <li>Diffusely irregular urinary bladder wall with focal bladder mass and likely early mass lesion at the cystourethral junction. Findings are most consistent with a transitional cell carcinoma, severe cystitis or less likely benign polyp.</li> <li>Large gallbladder sludge with mild gallbladder thickening and early polypoid projections of the gallbladder wall. The significance of the gallbladder polyps and debris is unclear. This could represent an early mucocele, cholestasis, or chronic inflammation, or could be an incidental finding.</li> </ul>
HoHoKus VH	
<b>REFERRING VET</b>	<b>SECONDARY FINDINGS:</b>
Dr. Eisenberg	<ul style="list-style-type: none"> <li>Heterogenous liver. The hepatic changes are consistent with age-related parenchymal remodeling and are not considered clinically significant at this time.</li> <li>Decreased corticomedullary distinction in both kidneys. The bilateral renal findings are</li> </ul>
<b>INVOICE</b>	
92320	
<b>DATE</b>	
10/12/21	



**PATIENT** consistent with age-related change.

Harry Spivack

**SPECIES**

Canine

**BREED**

West Highland White Terrier

**SEX**

Neutered male

**AGE**

16 years

**WEIGHT**

19.8 lbs

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The focal mass in the bladder has the characteristics most consistent with a neoplastic lesion, but polyps and inflammatory lesions can sometimes have a similar appearance. A definitive diagnosis cannot be determined by ultrasound alone.

- Recommend urine evaluation for BRAF mutation seen in patients with transitional cell carcinomas. A positive test is diagnostic; a negative test is inconclusive and will need further diagnostics.
- If negative or non-diagnostic BRAF consider traumatic catheterization to obtain representative cells for cytology, or biopsy sampling via either cystoscopy (if a female) or surgery.
- Patients with bladder pathology should always have urinalysis and culture performed. Ideally cystocentesis should be avoided in patients with suspected bladder masses to try and prevent tracking of tumor cells along the needle path (this has already been done).
- If TCC is confirmed consider referral to/consultation with a board certified. Veterinary oncologist for recommendations regarding treatment options and prognosis.
- I recommend three view thoracic radiographs.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Scott

**HOSPITAL NAME**

HoHoKus VH

**REFERRING VET**

Dr. Eisenberg

**INVOICE**

92320

**DATE**

10/12/21





**PATIENT**

Harry Spivack

**SPECIES**

Canine

**BREED**

West Highland White Terrier

**SEX**

Neutered male

**AGE**

16 years

**WEIGHT**

19.8 lbs

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Dr. Scott

**HOSPITAL NAME**

HoHoKus VH

**REFERRING VET**

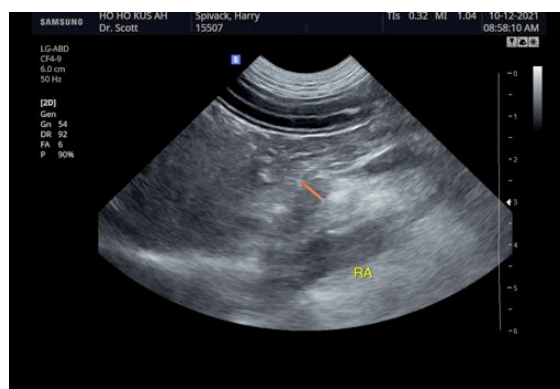
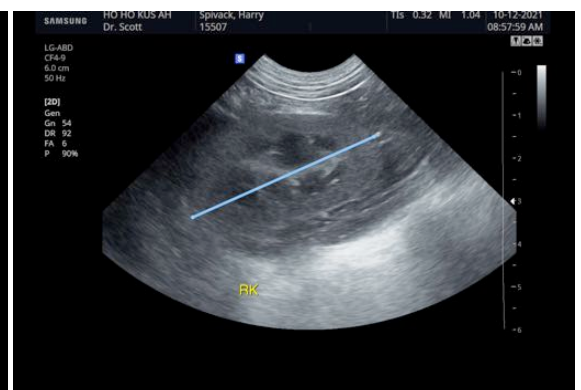
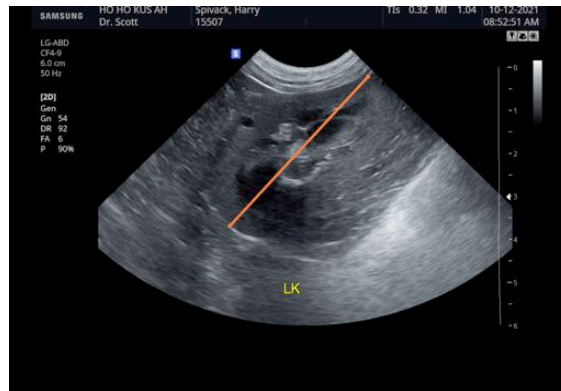
Dr. Eisenberg

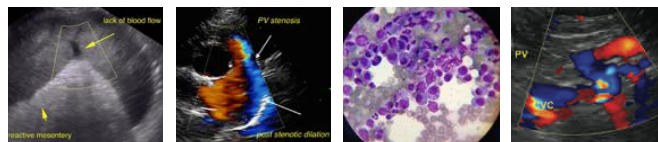
**INVOICE**

92320

**DATE**

10/12/21





**PATIENT**

Harry Spivack

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.

**SPECIES**

Canine

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.

**BREED**

West Highland White  
Terrier

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

**SEX**

Neutered male

**AGE**

16 years

**WEIGHT**

19.8 lbs

**INTERPRETED BY**

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

**IMAGING  
PERFORMED BY**

Dr. Scott

**HOSPITAL NAME**

HoHoKus VH

**REFERRING VET**

Dr. Eisenberg

**INVOICE**

92320

**DATE**

10/12/21