


**PATIENT PRESENTING CLINICAL SIGNS**

Antonella Zequeira

History: Presented for an abdominal ultrasound to evaluate the abdomen. Pt has a history of having cutaneous hemangiosarcoma tumors and developed a suspicious one today and it was removed and sent for histopathology. Also, the patient has a history of urinary incontinence and wants to evaluate the urinary tract for abnormalities. Want to make sure no mets or abnormalities are noticed in the abdomen and urinary system.

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: PE: cutaneous mass on right antebrachium round pigmented and blood filled. Rest WN: BW: CBC and CHEM wnl. U/A: USG: 1.036, no bacteria or blood seen. WNL

**BREED**

Pitbull Terrier

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**
**Urinary System**
**SEX**

Spayed Female

The urinary bladder wall is normal in thickness. The mucosal surface in the region of the apex is slightly irregular. The bladder lumen is mildly distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

**AGE**

6 years

The left kidney is normal in size (6.52 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter

**WEIGHT**

61.8 lbs

The right kidney is normal in size (6.89 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

**Adrenal Glands**
**INTERPRETED BY**

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

The left adrenal gland is normal in size (0.40 cm at cranial pole) (0.42 cm at caudal pole) (2.54 cm in length) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**IMAGING PERFORMED BY**

Dr. Ferrer, DVM

The right adrenal gland is in normal size (0.68 cm at cranial pole) (0.56 cm at caudal pole) (2.32 cm in length) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**HOSPITAL NAME**

 Paseos Veterinary  
 Center

**Spleen**

The spleen is subjectively normal in size (1.81 cm in width at the level of the hilus). A 0.95 cm ill-defined hypoechoic nodule is observed at the cranial aspect. The lesion causes slight capsular expansion. The remaining parenchyma is homogenous and is of appropriate echogenicity and detail. Splenic vasculature appears normal with no evidence of thrombosis.

**REFERRING VET**

Dr. Gabriel Ferrer

**Liver**

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative, or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

**INVOICE**

12137

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

**DATE**

2.2.23

### ***Gastrointestinal***

The gastric lumen is moderately distended with ingesta. 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 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.

### ***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***

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. A few prominent mesenteric lymph nodes are visualized (the largest measuring 2.50 cm in length). The nodes are normal in shape and echogenicity.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- The splenic nodule trends toward the benign (i.e., focus of lymphoid hyperplasia or similar). However, an emerging tumor cannot be excluded.

### **Secondary Findings**

- Bilateral chronic renal changes
- The lymph node changes are most consistent with reactive lymphadenitis or lymphoid hyperplasia.
- If the patient was fasted for this study, the presence of ingesta within the gastric lumen could suggest delayed gastric emptying. Correlation with the patient's clinical history is recommended.

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

- Consider a fine-needle aspirate of the splenic nodule (if clotting status is appropriate). A 25-gauge needle should be used. Thoracic radiographs are also recommended to assess for pulmonary metastatic disease.
- Regarding the urinary incontinence, consider the following:
  1. Urine culture and sensitivity to assess for occult infection
  2. If the urine culture is negative, consider empirical treatment for urethral sphincter mechanism incontinence (i.e., phenylpropanolamine or an estrogen product. The client should be warned of potential side effects associated with these drugs).
  3. If urinary incontinence persists despite an attempt at medical management, consider consultation with a board-certified to discuss placement of a urethral occluder or other interventional measures.



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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