

**DATE PRESENTING CLINICAL SIGNS**

12/21/21

History: Hx of protein in urine but today none found, appears to be losing protein of unknown cause. Hx of recent soft stools. Very large tumor that needs to come off, is affecting dog's QOL. Would like confirmation healthy enough to go to surgery.

**PATIENT**

Jerry Lansinger

Lab Results: bloodwork shows low total protein =5.2 and low albumin=2.0, glob normal, liver values normal, renal values normal. HCT 50%, no anemia but does have mild increase reticulocytes and a mild monocytosis. Don't think this involves liver tumor unless its bleeding. Attached separately.

**SPECIES**

Canine

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required for a full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

Jack Russell Terrier

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

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

**SEX**

Neutered Male

The prostate is normal in size (0.79 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

**AGE**

11/8/06

The left kidney has a normal shape and size (4.12 cm). Overall echogenicity is normal with adequate 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.

**WEIGHT**

10.8 Pounds

The right kidney has a normal shape and size (3.9 cm). Overall echogenicity is normal with adequate 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 0.49 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.

**IMAGING PERFORMED BY**

Stephanie Pearce  
RDMS, RVT

The right adrenal gland is normal in size measuring 0.40 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.

**HOSPITAL NAME**

White Marsh AH

**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. Brennan

**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.

**INVOICE**

33619

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. Duodenum wall measures 0.26 cm. Jejunum wall measured 0.23 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 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.

### ***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.

### ***Other***

There is a large, vascular, mixed echogenic mass evident on the left thorax/left side of the body, measuring 13.59 cm x 5.32 cm. On some images of the left kidney, there is questionable irregular tissue along the body wall. This could be abnormal tissue from the mass invading the abdominal cavity, it could be mass pooching between rib spaces, or it could be unassociated incidental, irregular appearing tissue.

## **PRIARY FINDINGS**

- Large, vascular, left-sided subcutaneous mass. There is a small amount of concern for possible invasion between rib spaces.

## **SECONDARY FINDINGS**

- Mild gallbladder sludge – The significance of the aggregated gallbladder sludge is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting.

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

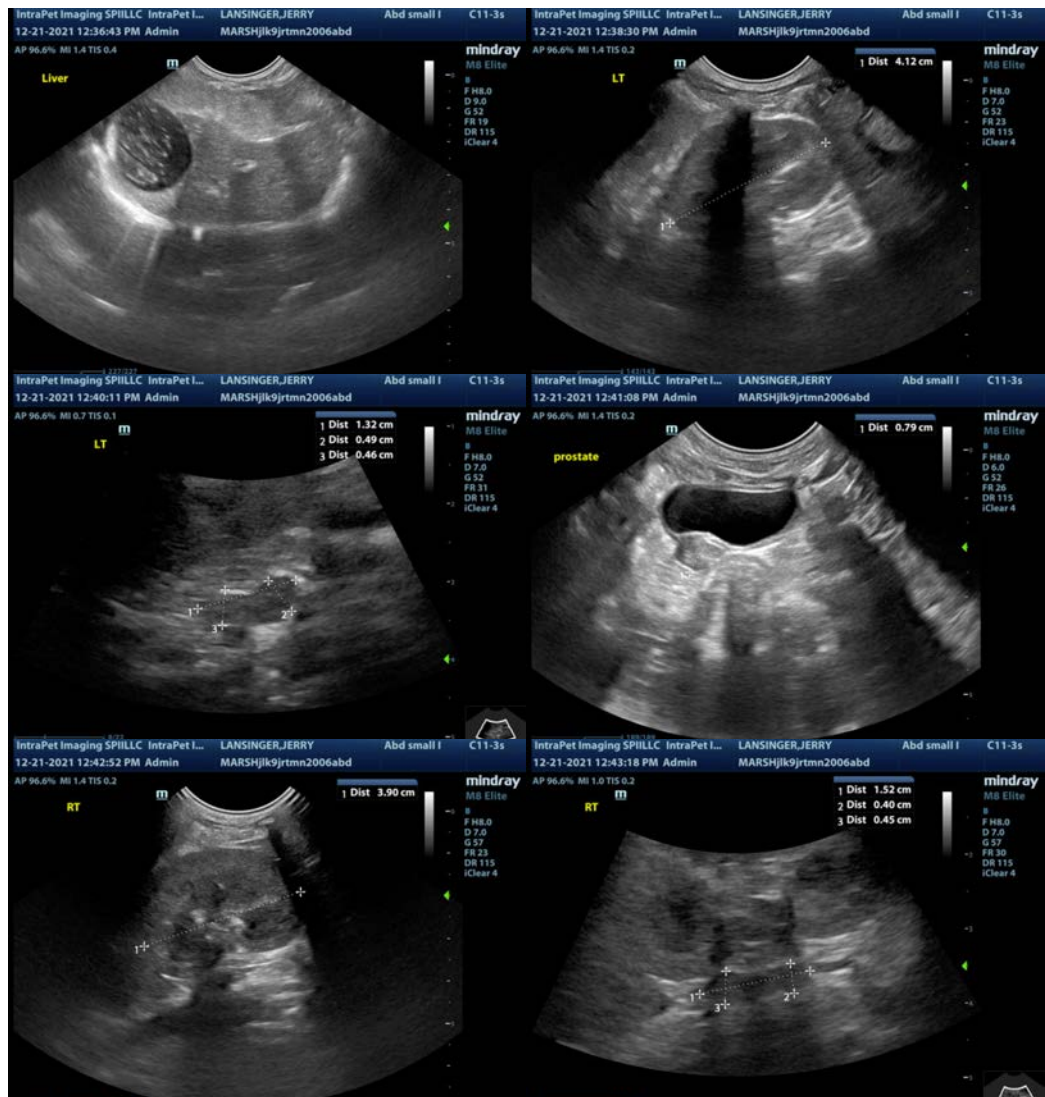
An obvious cause for the hypoalbuminemia reported is not identified. It is important to try and figure out a source for this. Low albumin levels can increase risk for stroke, pulmonary embolism, etc. These are not severely decreased protein levels, but additional diagnostics are recommended.

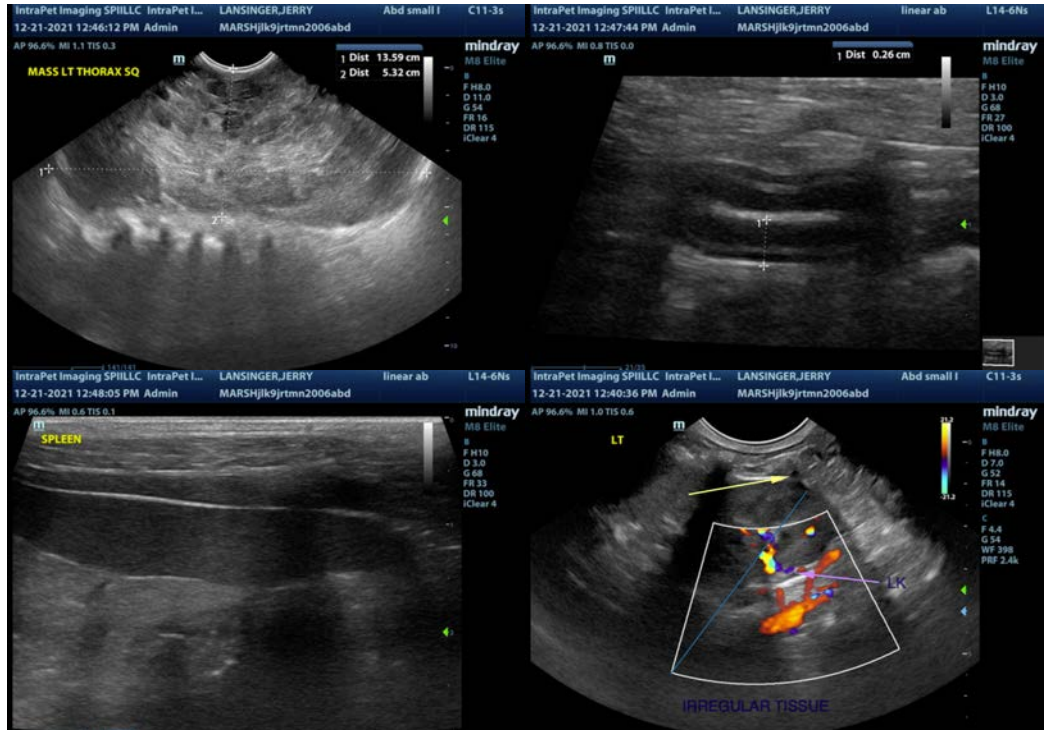
- Recommend urine protein/creatinine ratio despite a lack of proteinuria in the recent urinalysis.
- Recommend a pre- and post-prandial liver function test, as liver enzyme elevations are not always present with liver disease.

- Consider a GI panel to Texas A&M with a qualitative PLI, TLI, cobalamin and folate, as this can be an indicator for occult GI disease.

If not already done, recommend 3-view thoracic radiographs and a fine needle aspirate of the mass effect. On some images, there is questionable abnormal tissue between rib spaces. This could be an indicator of early invasion, or just the pressure of the mass. In an ideal situation, a thoracic CT scan would be performed prior to surgery to determine the extent of the lesion.

This is a senior dog with biochemical abnormalities, which are of unclear origin, so assurance that anesthesia is safe is difficult, but there are no visualized lesions on today's scan that absolutely preclude this possibility (i.e., diffuse metastasis, etc.). This is a clinical judgement based on the patient's quality of life, general health/appearance, and a discussion with the owner regarding risks and the potential benefit of a preoperative CT scan.





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.

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