

**DATE**

12/7/2021

**PRESENTING CLINICAL SIGNS**

History: 8-pound weight loss in one year, mild sarcopenia, urine accidents 1-2 months.

**PATIENT**

Charlie Lininger

Lab Results: 11/24/2021 TP 7.6, Albumin 2.6, Globulin 5.0, HGB 12, HCT 38%, Platelets 576, UA: USG 1040, protein +1, Rest WNL.

Radiographs:

Date of Previous IntraPet Ultrasound: No previous IntraPet scans.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**SPECIES**

Canine

**BREED**

Boxer Mixed Breed

**SEX**

Male, neutered

**AGE**

3/22/2012

**WEIGHT**

58 lbs.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Rachel Brillhart RDMS

**HOSPITAL NAME**

Jacksonville VC

**REFERRING VET**

Dr. Larsson

**INVOICE**

12684

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

The urinary bladder and visible portion of the pelvic urethra are normal for the degree of luminal distension. The urine is anechoic with no evidence of debris. Cystic calculi and discrete masses are not observed. The region of the trigone and the visible portion of the proximal urethra are normal.

The prostate is prominent in size (1.61 cm width) with normal curvilinear peripheral contours. The parenchyma is homogeneous. No focal lesions are observed. The prostatic urethra is not overtly dilated.

The left kidney is normal size (7.34 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal size (6.98 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydronephrosis. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal size (0.84 cm at cranial pole) (0.59 cm at caudal pole) (2.90 cm in length); 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.

The right adrenal gland is normal size (0.89 cm at cranial pole) (0.69 cm at caudal pole) (3.22 cm in length); 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.

**Spleen**

The spleen is enlarged with irregular peripheral contours. A >12 cm irregular heterogeneous cavitated mass is arising from the parenchyma. Some of the cavitations contain echogenic debris. A 1.30 x 1.25 cm hypoechoic to heterogeneous nodule is also observed at the cranial lateral aspect. This lesion causes capsular expansion. The mesentery effacing the serosal surface is hyperechoic. The remaining parenchyma is slightly mottled in appearance. Splenic vasculature appears normal with no evidence of thrombosis.

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

### ***Gastrointestinal***

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. 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 not dilated. 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. No obstructive disease is noted.

### ***Pancreas***

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

### ***Free Abdomen***

There is no evidence of free fluid. A 2.00 x 1.53 cm epigastric lymph node is visualized.

### ***Other***

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

- Large splenic mass and smaller nodule. Neoplasia (i.e., sarcoma, round cell tumor) is considered likely with a low possibility of benign pathology.
- The mild prostatomegaly may be a normal variant for this patient. Early neoplasia (i.e., prostatic adenocarcinoma, transitional cell carcinoma) is possible. If the patient was neutered late in life, hyperplastic change may be causing the mild enlargement.

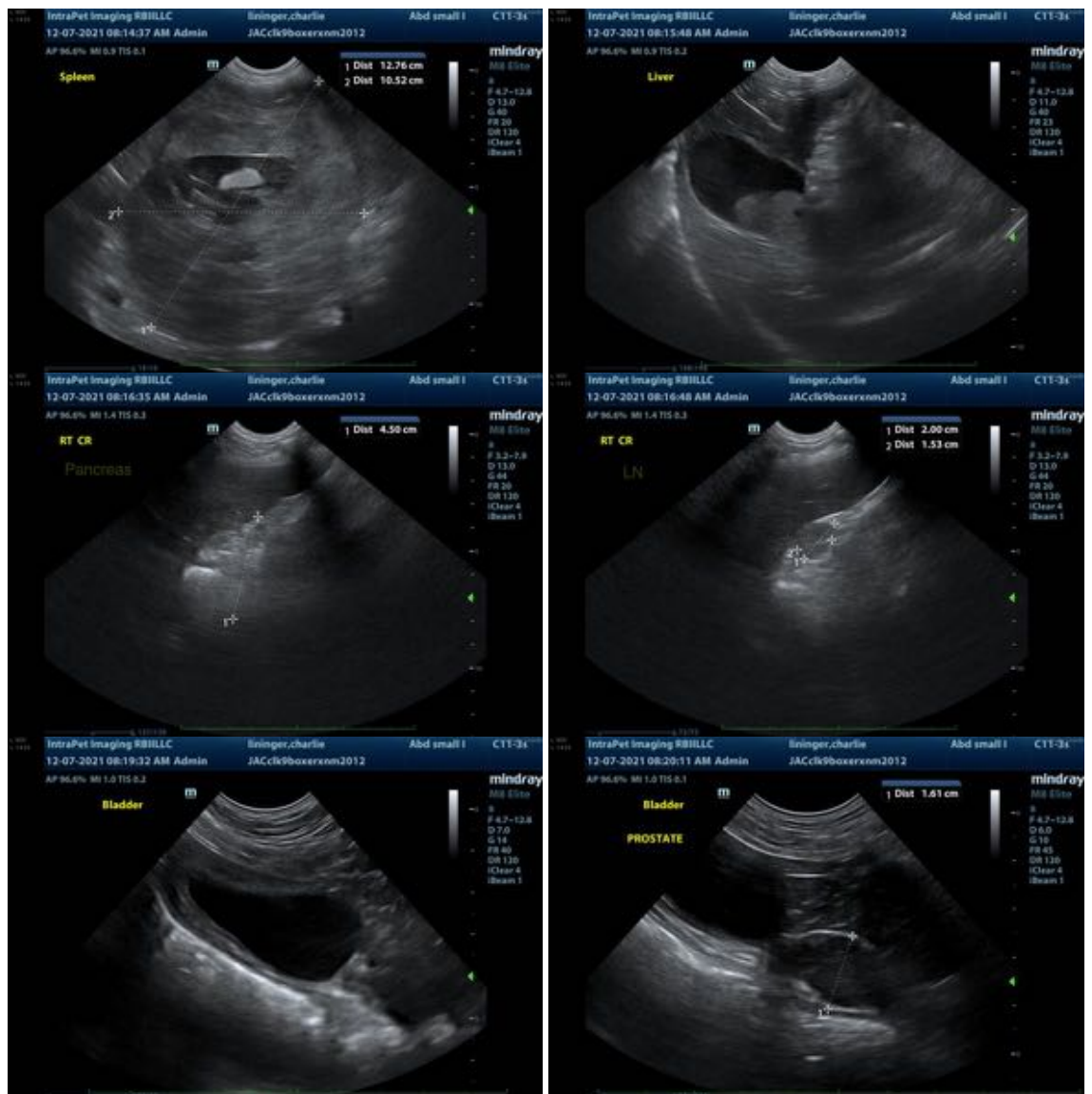
### **Secondary Findings:**

- The prominent epigastric lymph node is likely reactive with lower potential for infiltrative neoplasia.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Gallbladder sludge, non-mucocele.

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

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

- If there is no evidence of pulmonary metastatic disease and an aggressive approach is desired, consider splenectomy with submission of the spleen for histopathology. A liver biopsy should also be obtained at the time of surgery to assess for micrometastatic disease.
- Regarding the patient's inappropriate urinations, consider the following:
  1. Urine culture and sensitivity
  2. Urine BRAF test to screen for lower urinary tract neoplasia
  3. UPC





**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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