

**DATE**

9/20/21

**PRESENTING CLINICAL SIGNS**

History: Abnormal biannual labs with ADR at home per O.  
 Current Medications: Not provided by the veterinarian.  
 Lab Results: hypoglycemia, hyperproteinemia, hyperglobulinemia hypoalbuminemia.  
 Radiographs: Not provided by the veterinarian.  
 Date of Previous IntraPet Ultrasound: No previous IntraPet scans.  
 Sedation: oral  
 Stat Report: not requested / declined

**PATIENT**

Joey Williams

**SPECIES**

Canine

**BREED**

Chihuahua mix

**SEX**

Neutered male

**AGE**

10/6/09

**WEIGHT**

16.9 lbs

**INTERPRETED BY**

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

**HOSPITAL NAME**

Happy Tails VH

**REFERRING VET**

Dr. Calpeno

**INVOICE**

12218

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

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately 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.

The prostate is prominent in size (1.30 cm in width) with a normal shape and smooth peripheral contours. Parenchyma is homogenous. No focal lesions are observed. The prostatic urethra is visible but not overtly dilated.

The left kidney is normal size (4.73 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 hydroureter. Renal vasculature is normal.

The right kidney is normal size (5.15 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is mildly enlarged (0.46 cm at cranial pole) (0.59 cm at caudal pole) (1.84 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 mildly enlarged (0.52 cm at cranial pole) (0.63 cm at caudal pole) (1.55 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 subjectively enlarged with irregular peripheral contours. An approximately 4 cm irregular hypoechoic to heterogeneous vascular mass is arising from the parenchyma. The mass causes capsular expansion. The remaining parenchyma is mostly homogeneous in appearance. Splenic vasculature is normal with no evidence of thrombosis.

**Liver**

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen with minor changes consistent with age-related remodeling. No focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A moderate

amount of echogenic debris is observed within the lumen, some of which is gravity-dependent and some of which is adherent. 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***

A portion of the pancreas is obscured by the splenic mass. In the visualized portions, the pancreas is visible with minimal deviation from the normal peripheral contours. The parenchyma is subtly mottled in appearance with parenchyma that is isoechoic relative to surrounding omental fat. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated.

### ***Free Abdomen***

There is no evidence of free fluid. The abdominal lymph nodes are normal/not visible.

### ***Other***

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

A few ring down lesions are suspected within the thorax.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

- Splenic mass. Neoplasia (i.e., round cell tumor, sarcoma) is considered likely with a low possibility of a benign process.

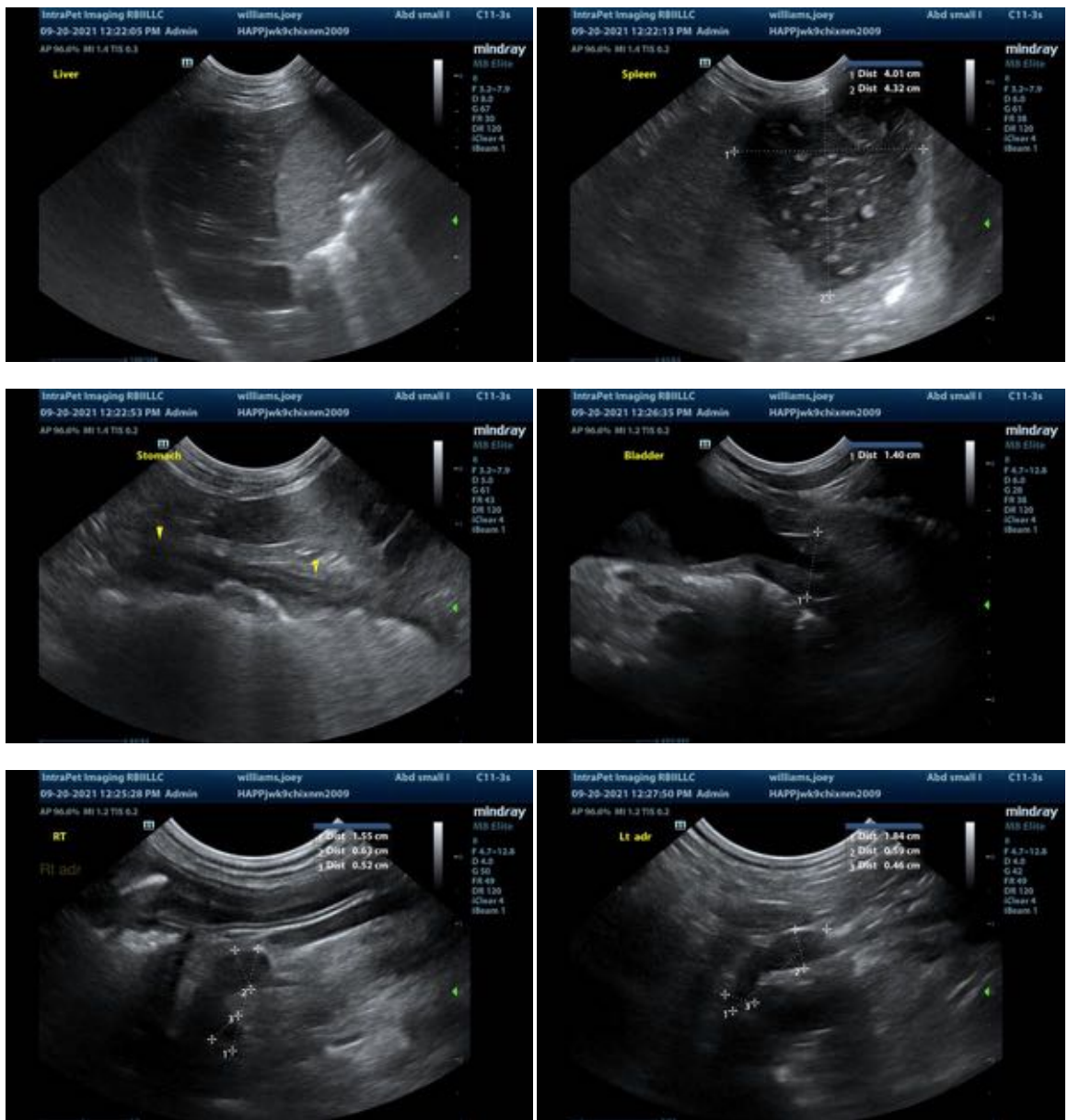
### **Secondary Findings:**

- Mild bilateral adrenomegaly.
- Mild age-related hepatic and renal changes.
- Gallbladder debris- incidental.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- The prominent prostate may be secondary to late in life neutering, normal variation or an early neoplastic process. Correlation with clinical findings is recommended.
- The ring down lesions are suggestive of pulmonary parenchymal disease.

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

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

- A fine needle aspirate of the splenic mass is recommended (if clotting status is appropriate). A 25 gauge needle should be used. Depending on cytology results, a splenectomy may be warranted.
- Regarding the hypoglycemia, consider a repeat blood glucose using a glucometer. If hypoglycemia is persistent, consider the following diagnostics:
  1. Insulin: glucose ratio
  2. Pre- and post-prandial serum bile acids to assess hepatic function





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.

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)  
Andrea.nicastro@sonopath.com