



**PATIENT PRESENTING CLINICAL SIGNS**

**Odie Jones** History: Presented at our hospital for straining to defecate, last bm was yesterday and he only produced small amount of mucous covered stool. O notes pt seems to have a harder time standing in hind end. Licking hind left foot.

**SPECIES** Previous Health Concerns: Pancreatitis in March, dx with splenic tumor also dx.  
Current Medications: none

**Canine** Abnormal PE/Chem/CBC/UA Results

Bloodwork: ALB 4.1; GGT 16; LYM# 0.74; NEU% 86.3; LYM% 6.5; Epoc wnl

**BREED** Rads: Enlarged prostate, bladder and all organs pushed cranially, increased gas throughout intestines, ingesta in stomach

Mastiff Mix

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SEX** *Urinary System*

**Intact Male** The urinary bladder is moderately distended with anechoic urine. The wall in the region of the apex is mildly thickened (up to 0.69 cm) with a slightly irregular mucosal surface. The wall tapers to a normal thickness as it extends towards the cystourethral junction. No cystic calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

**AGE**

**10 years** The prostate is enlarged (5.54 cm in width) with a slightly irregular shape. The parenchyma is hyperechoic relative to surrounding omental fat and heterogenous in appearance, with several, ill-defined cystic areas. There is evidence of capsular effusion. The prostatic urethra is not overtly dilated.

**WEIGHT**

**31 kg** The left kidney is normal size (6.43 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. Several nonobstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

The right kidney is normal size (6.81 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild loss of corticomedullary distinction. A few nonobstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

**IMAGING PERFORMED BY**

Erin Wicks

**Adrenal Glands**

The left adrenal gland is normal size (0.50 cm at cranial pole) (0.69 cm at caudal pole) (2.58 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.

**HOSPITAL NAME**

Shores Vet Emerg Ctr

The right adrenal gland is normal size (0.93 cm at cranial pole) (0.62 cm at caudal pole); 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.

**REFERRING VET**

Dr Zippay

**Spleen**

The spleen is normal in size (2.17 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A 2.43 cm hypoechoic +/- slightly cavitated mass is observed at the cranial aspect. The lesion causes slightly capsular expansion. Splenic vasculature is normal.

**INVOICE**

11964

**DATE**

11.4.22

### ***Liver***

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen. A small, ill-defined hyperechoic nodule is observed on the left side. The remaining parenchyma is homogenous. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The gall bladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. 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 mildly 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 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***

The mesentery in the caudal abdomen is hyperechoic. Trace free fluid is observed. The medial iliac lymph nodes are prominent (the largest measuring 3.32 in length) and hypoechoic to slightly heterogenous in appearance.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- The prostate changes are most consistent with benign prostatic hyperplasia with parenchymal cysts. Bacterial prostatitis is also of concern, particularly given the caudal peritonitis and subcapsular effusion associated with the prostate.
- The urinary bladder wall changes are suggestive of cystitis.
- Splenic mass. Neoplasia (i.e., sarcoma, round cell tumor) is suspected with a lower possibility of a benign process (i.e., focus of lymphoid hyperplasia, extramedullary hematopoiesis, or similar).
- The medial iliac lymphadenopathy likely represents reactive change. However, infiltrative neoplasia cannot be completely excluded.

### **Secondary Findings**

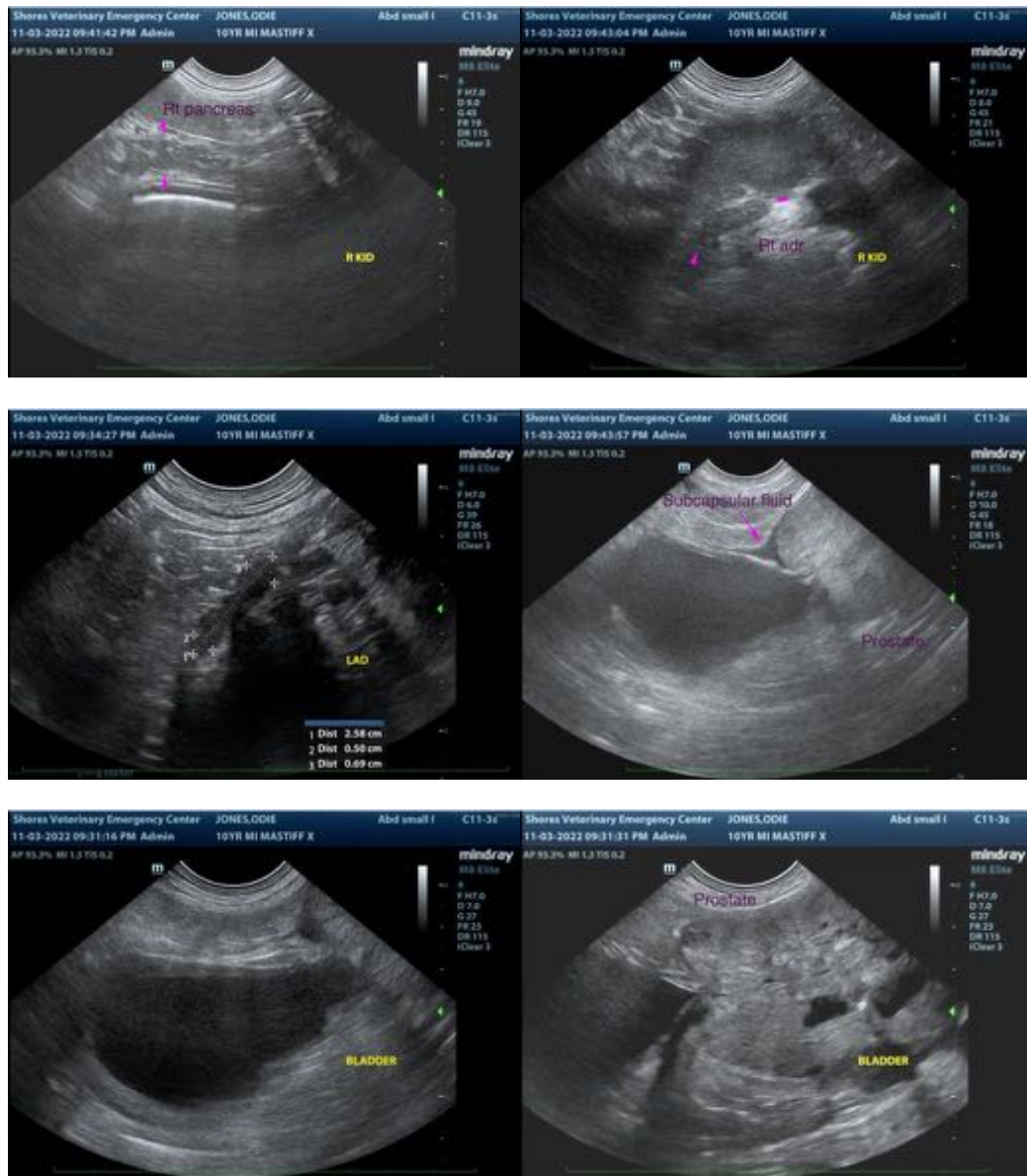
- Mild, bilateral, age-related renal changes with nonobstructive nephrolithiasis
- Minor, age-related pancreatic remodeling

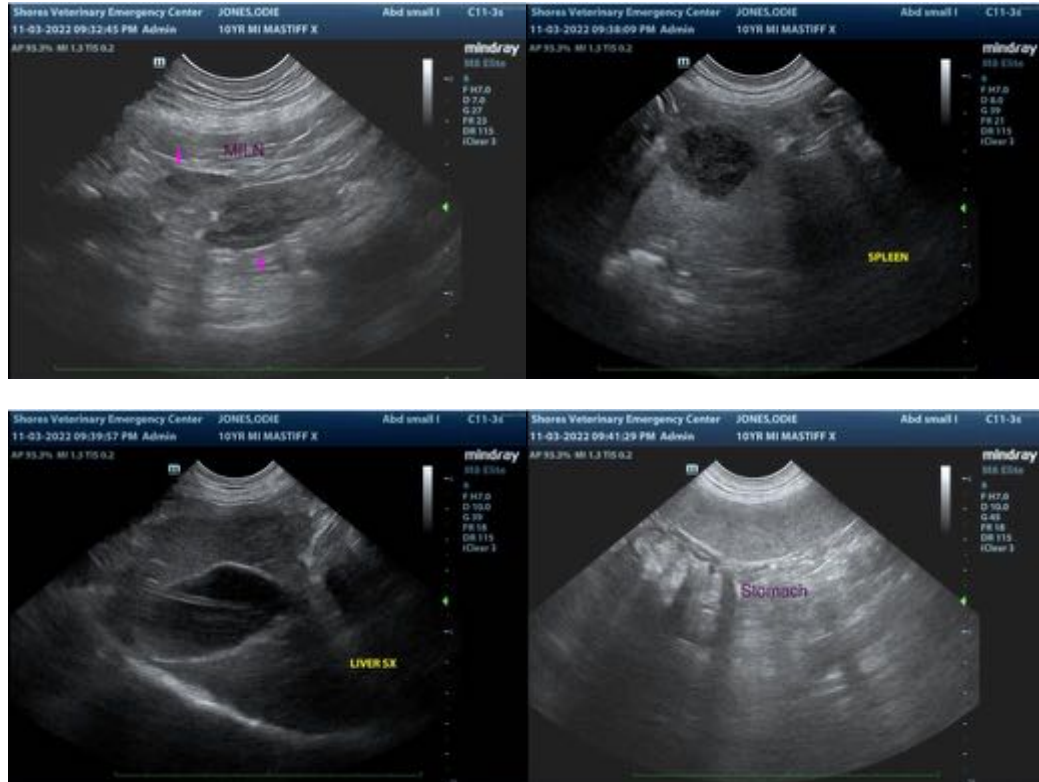
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

A urine culture and sensitivity is recommended to further assess for bacterial prostatitis. Also consider a fine-needle aspirate of the prostate. While awaiting test results empirical treatment for bacterial prostatitis (i.e., fluoroquinolone) is recommended. Castration should also strongly be considered.

Regarding the splenic mass, consider a fine-needle aspirate, if clotting status is appropriate. If aspiration is pursued, 5-10 minutes of sonographic monitoring is recommended following the procedure to assess for iatrogenic hemorrhage. Alternatively, a splenectomy with submission of the spleen for histopathology can be considered.

Three-view thoracic radiographs are recommended to assess for pulmonary metastatic disease, particularly if the patient is to undergo anesthesia.





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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