



## PATIENT PRESENTING CLINICAL SIGNS

**Pati** Monreal  
**History:** Pet has been diabetic since July, currently been managed with vetsulin 4 units BID. Pet presented yesterday for lethargy and episodes where he collapses and will urinate on himself. Pet had radiographs done in March due to cough and trouble walking, mainly dragging R rear leg. Radiologist mentioned that there was mild widening of mediastinum and possible allergic bronchitis. No osseous abnormalities seen.

## SPECIES

**Feline**  
**Abnormal PE/Chem/CBC/UA Results:** On PE pet is mainly recumbent, deep pain present in all limbs and responds to stimuli. Bladder was overly distended, so cycle was attempted to relieve some pressure, bladder was soft on palpation and pet did not appear painful. Pet started urinating a normal stream on his own but appears like bladder control could be an issue. Pet also appears dehydrated, so he has been hospitalized on IV fluids. BW: RBC: 6.33 L Mono: 0.6 H BUN: 56 H SDMA: 15 chloride: 109 L Alb: 4.0 H ALT: 245 ALP: 67 Glu: 74 N T4: 0.7 L fell/fiv/hw: neg UA: 1.022 glu: 1,000 ket: 15

## BREED

DSH

## SEX

Neutered Male

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder is distended. Luminal contents are anechoic. No masses, inflammatory changes or calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

## AGE

14 years

The **left kidney** is normal size (4.62 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is mildly thickened and there is moderate loss of corticomedullary distinction. Mild pyelectasia is present (0.24 cm in the transverse plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

## WEIGHT

14 lbs

The **right kidney** is normal size (4.49 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is mildly thickened and there is moderate loss of corticomedullary distinction. Trace pyelectasia is present (0.19 cm in the transverse plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

## INTERPRETED BY

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

### Adrenal Glands

The **left adrenal gland** is normal size (0.48 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

## IMAGING PERFORMED BY

Dr Reyes

The region of the **right adrenal gland** is evaluated. No obvious pathology is observed.

## HOSPITAL NAME

Mobile Vet Ultrasound

### Spleen

The **spleen** is normal in size (0.86 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

## REFERRING VET

Dr Pedro Santiago

### Liver

The **liver** is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is hyperechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately 1: 1.

## INVOICE

11834

## DATE

10.14.22

### ***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 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 base and limbs of the **pancreas** are 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***

Trace free fluid is observed. The abdominal **lymph nodes** are normal/not visible.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- The hepatic parenchymal changes may be secondary to a diabetic hepatopathy, hepatic lipidosis, inflammatory disease, infiltrative neoplasia (i.e., lymphoma), other hepatopathy.
- Trace ascites

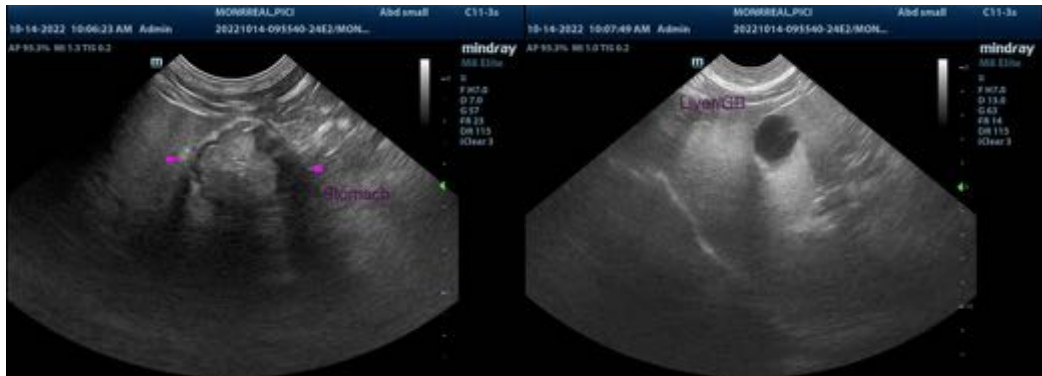
### **Secondary Findings**

- Mild age-related pancreatic remodeling. Mild chronic pancreatitis may also be present, particularly if the patient's clinical history is supportive of this diagnosis.
- The bilateral renal changes are most consistent with chronic interstitial nephrosis/nephritis. The bilateral pyelectasia may be secondary to age-related remodeling, pyelonephritis, IV fluid therapy, or some combination thereof.

\*An obvious cause for the patient's clinical signs is not identified in this study.

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

- Given the patient's age and clinical signs, consider repeating thoracic radiographs to reassess for abnormalities in the chest.
- Consider a urine culture and sensitivity to assess for occult infection.
- A fine-needle aspirate of the liver can also be considered if clotting status is appropriate. A 25-gauge needle should be used.
- A baseline blood pressure measurement is recommended to assess for systemic hypertension.
- Consultation with a board-certified neurologist is recommended for further testing (i.e., MRI).





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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