

**DATE**

7/25/22

**PRESENTING CLINICAL SIGNS****PATIENT**

Eve Angelucci

History: Yesterday morning P ate and O gave insulin. Around 1pm P was ADR and lethargic. At 5pm P did not want to eat. O did not give insulin. P started to have diarrhea. Today P was lethargic, vomiting, and having diarrhea. P is a known diabetic since the beginning of this year. P is currently on 5U of \_\_\_insulin BID. P had a glucose done 2 months ago and it was higher than normal so rDVM increased insulin from 4U->5U.

**SPECIES**

Canine

Current Medications: None listed.

Lab Results: See attached.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

Mixed Breed

Imaging Performed By: Andi Parkinson, BS, RDMS.

**SEX**

Spayed Female

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****AGE**

7/24/10

**Urinary System**

The **urinary bladder** and visible pelvic urethra were unremarkable for the level of repletion presented. The urine, however, did present some moderate mildly echogenic debris consistent with mucous, exfoliated cells from renal or bladder origin, and/or blood clots as these echogenic changes can all present similarly. This is often related to urinary tract infection but may represent simple evidence of exfoliated debris or sterile inflammation. Cystocentesis, urinalysis, +/- culture would be recommended to rule out and define any UTI.

**WEIGHT**

15.4 Pounds

The **kidneys** were normal in size and contour; however, a minor hyperechoic ring was noted at the corticomedullary junction. This is consistent with mild diabetic nephropathy. This is likely from glucosuria. However, assessment for proteinuria is also warranted. This is an idiopathic finding, but an expected finding in diabetic patients. The left kidney measured 4.95 cm. The right kidney measured 5.32 cm.

**INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSS**Adrenal Glands**

The **adrenal glands** appeared slightly enlarged and swollen. No evidence of focal capsular expansion or invasion into the phrenic veins were noted. No overt suspicion of neoplasia was noted. This is considered mild and likely a hyperplastic change associated with stress or adrenal endocrinopathy (PDH). If isosthenuria is persistently present and the patient morphologically suggests Cushing's disease then ACTH testing would be indicated. The left adrenal gland measured 1.81 cm x 0.71 cm at the cranial pole and 0.85 cm at the caudal pole. The right adrenal gland measured 2.51 cm x 0.99 cm at the caudal pole and 0.88 cm at the cranial pole.

**HOSPITAL NAME**Animal Emergency  
Hospital**REFERRING VET**

Dr. Roper

**Spleen**

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

**INVOICE**

16542

**Liver**

The **liver** presented mild heterogenous parenchyma with increased portal markings and coarse architecture. Slight undulating capsular contour was noted. The gallbladder and common bile duct were unremarkable. This is consistent with chronic inflammatory hepatopathy.

### ***Gastrointestinal***

The **upper gastrointestinal tract** was unremarkable. Minor colonic fluid accumulation noted.

### ***Pancreas***

The **pancreas** revealed mixed echogenic coarse architecture, irregular contour and enhanced surrounding mesentery, suggestive for chronic active pancreatitis. A region of 4.5 cm x 2.0 cm was noted in the right limb.

## **ULTRASONOGRAPHIC FINDINGS**

- Chronic active pancreatitis presentation
- Bilateral adrenal hypertrophy, suspect PDH/Cushings
- Secondary gastroenteritis, likely owing to the diabetic state

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

IV fluid support, GI protectants, treatment for pancreatitis/gastroenteritis warranted with eventual work up for Cushings if all parameters are present and isosthenuria is persistent. No evidence or suspicion of neoplasia.

Potential Causes of Diabetic Dysregulation

This is a suggestive checkoff list when faced with an unregulated diabetic patient:

UTI

Dietary indiscretion/intolerance

Pancreatitis

Hyperthyroidism/hypothyroidism

Exogenous steroids (including topical eye meds)

Cushing's

Acromegaly

Owner compliance

Insulin quality issues

Antibodies to insulin

Underlying Neoplasia





**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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