



## PATIENT PRESENTING CLINICAL SIGNS

**Oliver Douglass** History: p presented as a transfer for urethral obstruction. P is a newly diagnosed diabetic as of 1 week ago. No urinary issues in the past.

**SPECIES** Abnormal PE/Chem/CBC/UA Results: On presentation: Mild azotemia Anemia (22%) Leukocytosis (25K)  
**Feline** Ketones: negative U/A: RBC, WBC, Cocci, no crystals, USG 1.052 4/30 Normal BUN/Creat PCV: 18%, TS: 5.2 Rec'd AUS due to worsening anemia, eval kidneys for CKD meds: Unasyn, Cerenia, Gabapentin, Lantus

## BREED ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### DSH **Urinary System**

The urinary bladder is contracted. The wall is of appropriate thickness for the level of repletion. At least one to two cystic calculi are observed within the lumen (the largest measuring 0.44 cm in diameter).

### SEX

**Neutered Male** The left kidney is normal in size (3.47 cm in length) with a normal shape, architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with mild to moderate loss of corticomedullary distinction. Several nonobstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter.

### AGE

**14 years** The right kidney is prominent in size (4.79 cm in length) with a normal shape and smooth peripheral contours. There is mild loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. Trace pyelectasia is present. There is no evidence of infarcts or hydroureter.

### WEIGHT **Adrenal Glands**

7.67 kg

(No images provided of the left adrenal gland).

The right adrenal gland is normal size (0.46 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature appear normal.

## INTERPRETED BY

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

### **Spleen**

The spleen is normal in size (0.78 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 appears normal.

## IMAGING PERFORMED BY

Alyssa Carver

### **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.

## HOSPITAL NAME

Animal EH Volusia

The gall bladder lumen is moderately distended. The wall is thin and smooth. A scant amount of aggregated echogenic debris is suspended within the lumen. The cystic and common bile ducts are normal.

## REFERRING VET

Alyssa Carver

### **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 is normal in thickness 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.

## INVOICE

12911

### **Pancreas**

The base and limbs are prominent in size with slightly irregular peripheral contours. The parenchyma is

## DATE

4.30.23

hypoechoic relative to surrounding omental fat and subtly nodular in appearance. The pancreatic duct is not overtly dilated. Surrounding mesentery is hyperechoic.

### **Free Abdomen**

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

## **ULTRASONOGRAPHIC FINDINGS**

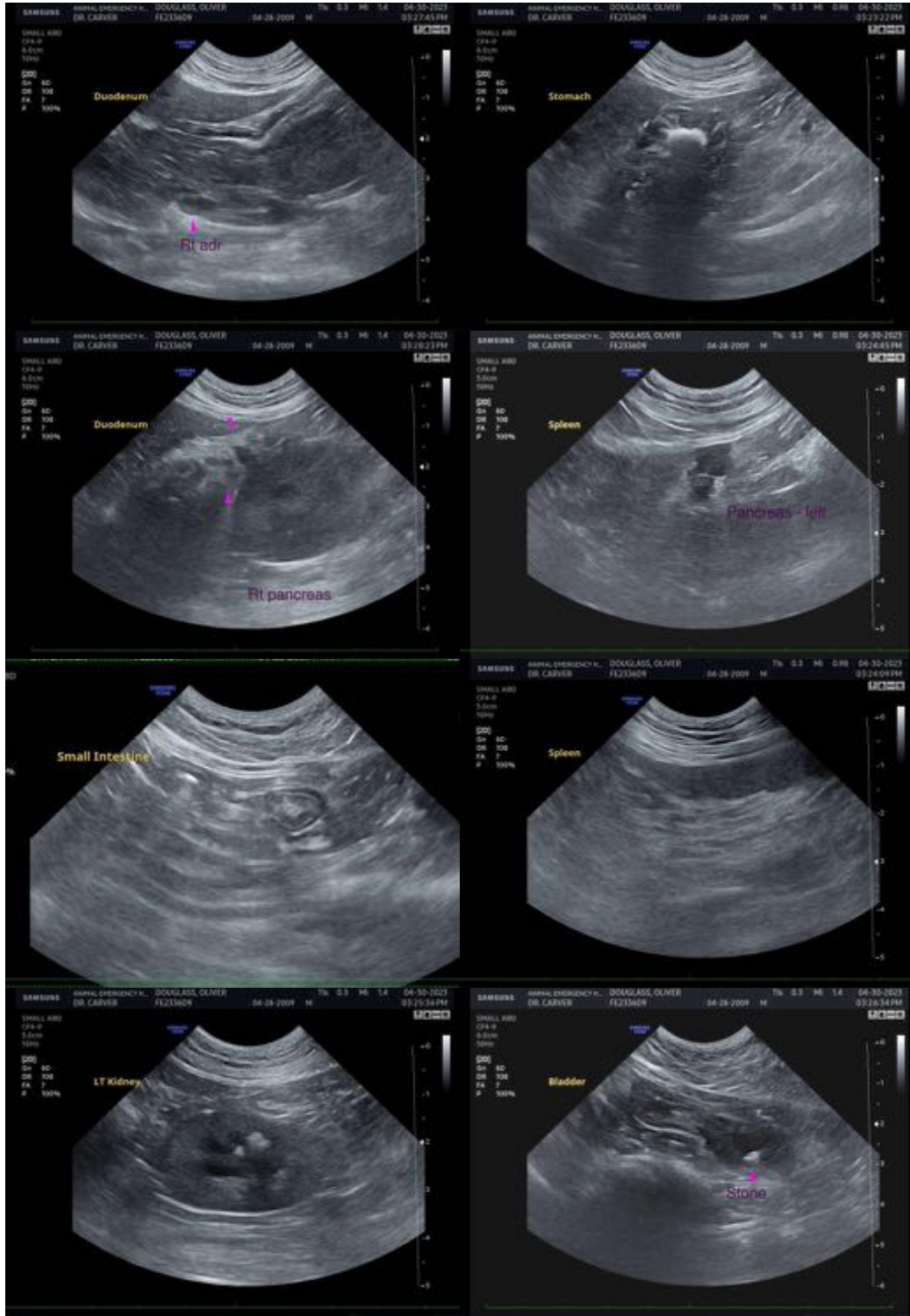
### **Findings**

- The pancreatic changes could be consistent with mild to moderate acute or chronic active pancreatitis +/- benign nodular hyperplasia. Focal peritonitis is present.
- Cystic calculi
- Bilateral chronic age-related renal changes with nonobstructive nephrocalcinosis

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

- Supportive care for pancreatitis is recommended including IV fluid therapy, gastric protectants, antiemetics, pain medication as needed, +/- fresh frozen plasma.
- Regarding the anemia, consider the following:
  1. Three-view thoracic radiographs to assess for occult neoplasia in the chest
  2. CBC (send to a diagnostic lab) with a reticulocyte count
  3. Consider a feline vector-borne disease panel
  4. If the above diagnostics are inconclusive, and the anemia is non-regenerative, a bone marrow aspirate may be warranted. If pursued, a feline leukemia immunofluorescence assay on the sample is also recommended.
- When the patient's clinical condition has stabilized a cystotomy with stone removal, analysis, and culture is recommended. Alternatively, an attempt at medical dissolution can be considered with broad-spectrum antibiotics and a prescription urinary diet. However, if the stone size does not begin to improve within 4-6 weeks of initiating therapy, a cystotomy should be revisited.







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.

**Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)**  
[info@SonoPath.com](mailto:info@SonoPath.com)