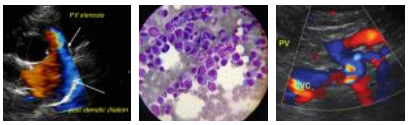
IMAGING PERFORMED BY

IntraPet.com

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

**DATE**
06/14/2022

**PATIENT**
Alice Graef

**SPECIES**
Feline

**BREED**
DSH

**SEX**
FI

**AGE**
12/31/2010

**WEIGHT**
5.67 lb

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

**HOSPITAL NAME**
Banfield Timonium

**REFERRING VET**
Dr. Borrison

**INVOICE**
10800ag

## PRESENTING CLINICAL SIGNS

Chronic E.coli UTI (Age unknown, probably older than birthdate in system; unknown spay status, no signs of heat in the few years that current O has had pet) P is hyperthyroid and has chronic kidney disease

Current Medications: 2.5 mg methimazole BID, Dasuquin advanced for cats, Convenia given to treat UTI, last injection given on 4/23. Gabapentin the night before and 2 hours before.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder presented a relatively uniform thickening of the cranioventral and craniodorsal mucosae with micropolyploid mucosal changes without involvement of the submucosae. The urine presented some echogenicity consistent with suspended debris. No evidence of urethral pathology was present. This presentation is most consistent with chronic cystitis. Technically transitional cell carcinoma cannot be ruled out without histopathological review but is not overtly suspected based on this pattern. Cystocentesis and urine culture +/- pathological review of urine cytology would be warranted. No overt calculi were present at this time.

The kidneys presented a relatively uniform cortical hyperechogenicity when compared to the renal medulla, spleen and liver. No overt masses were noted. Corticomedullary definition was nebulous and the ratio favored the cortex slightly. The ureters were not visible and assumed to be normal. These changes are most consistent with chronic moderate interstitial nephritis yet infiltrative disease could not be entirely ruled out without biopsy though neoplasia is not suspected. Nonobstructive nephrolithiasis up to 0.15 cm was noted in the right kidney. The left kidney exhibited nephrolithiasis measuring up to 0.19 cm. The left kidney measured 3.0 cm in length. The right kidney measured 2.9 cm in length.

The uterus and ovaries were sonographically unremarkable. The uterus measured 3mm and was empty.

### *Adrenal Glands*

The left adrenal gland was visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 0.43 cm width. No overt pathology in the area of the right adrenal gland.

### *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.

### *Liver*

The liver images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some age-related parenchymal remodeling was noted but likely not clinically

significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.

### *Gastrointestinal*

The gastrointestinal tract revealed minor variable thickening and echogenic submucosal changes most consistent with low grade end result of chronic GI disease such as IBD and may be related to malassimilation of nutrients if any weight loss is present. No obvious neoplastic patterns were noted and luminal content as unremarkable. Intestinal wall thickness up to 0.33 cm width was noted.

### *Pancreas*

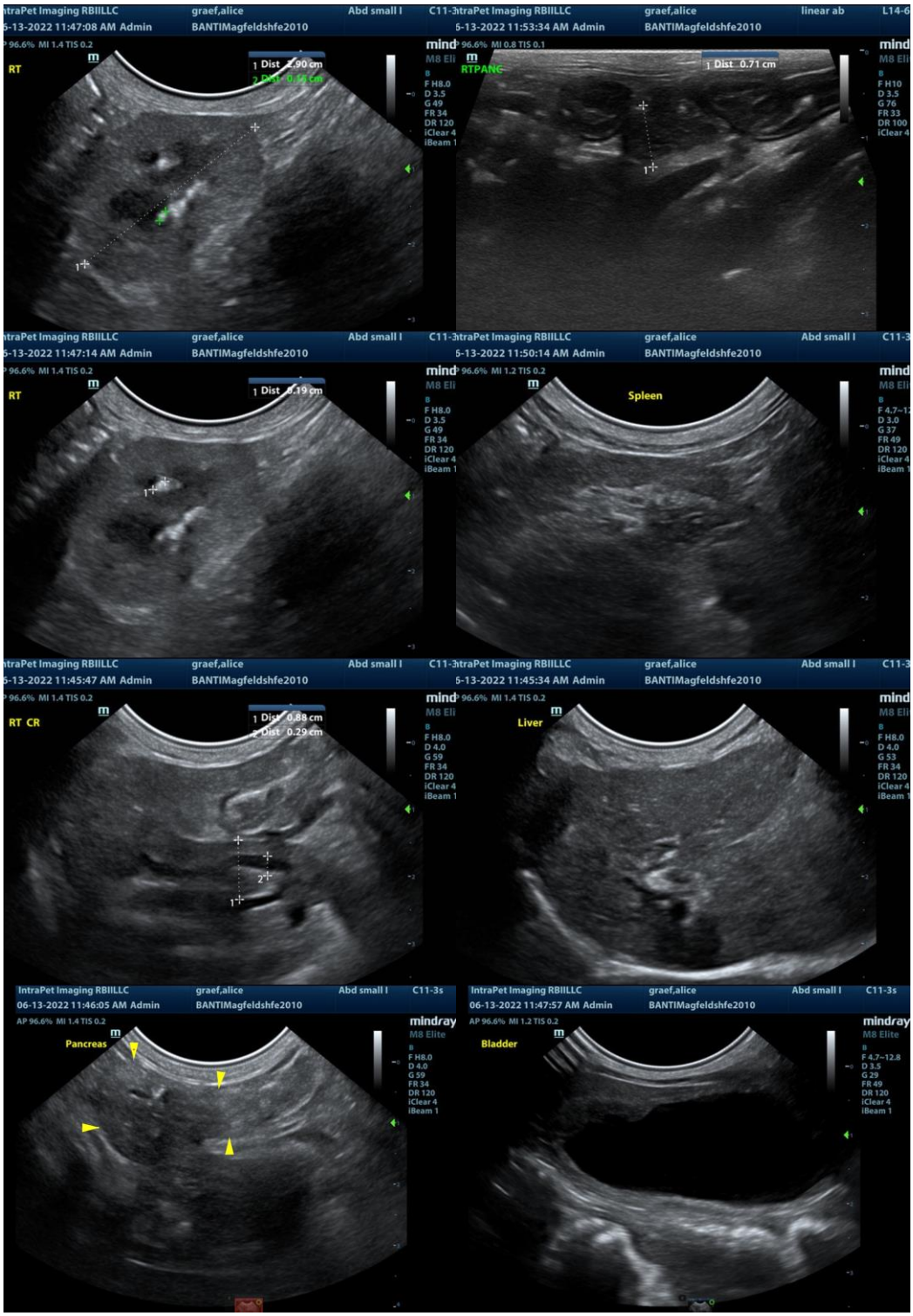
The base and limbs of the pancreas were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

## ULTRASONOGRAPHIC FINDINGS

- Chronic triad presentation with moderate degenerative renal changes and corticomedullary mineralization
- Low grade pancreatitis
- Inflammatory bowel patten
- Polyploid cystitis-consistent with chronic UTI-minor potential for neoplasia

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No neoplastic criteria was observed in any organ system. The urinary bladder revealed apical ventral and dorsal thickening and polyploid changes deriving from the mucosa. This is consistent with polyploid cystitis. There is mild potential for underlying carcinoma. Resection of the polyploid changes could occur, however would require removing cranial two thirds of the cranial bladder with appropriate biopsies.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graef,alice
Abd small I
C11-3
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2 Dist 0.44 cm
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Spleen
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Liver
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Pancreas
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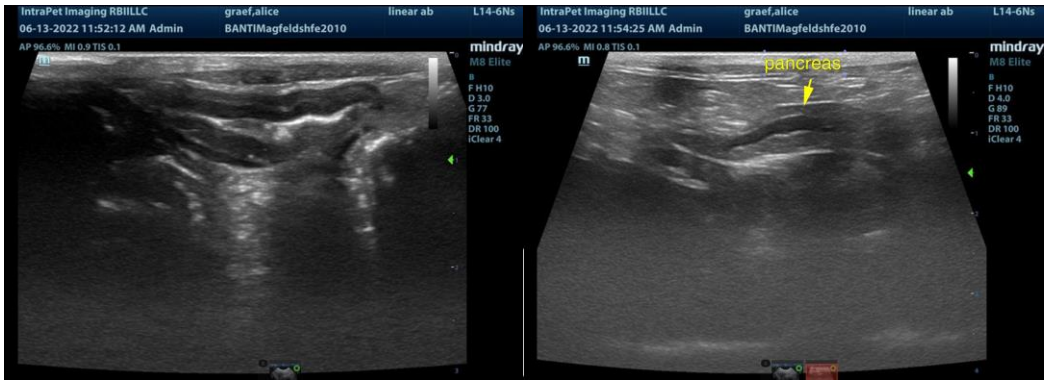
Bladder
mindray
M8 Elite




**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.

**Eric Lindquist**, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
Eric.Lindquist@SonoPath.com