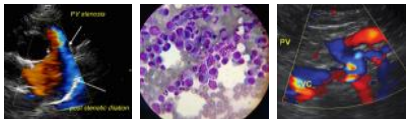
IMAGING PERFORMED BY

IntraPet.com



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

DATE

5/10/23

PATIENT

Frankie McNulty

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

5/4/12

WEIGHT

3.6 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Charm City Vet

REFERRING VET

Dr. Hansen

INVOICE

22456

PRESENTING CLINICAL SIGNS

History: Intermittent incontinence and inappropriate urine in face of unremarkable UA.

Current Medications: None listed.
Radiographs: See attached rad report.
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**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

The **kidneys** revealed a chronic interstitial nephrosis pattern with cortical infarcts and pelvic and corticomedullary mineralization. The largest calculus in the right kidney measured 0.48 cm. The right kidney measured 4.75 cm. Hyperechoic medullary rim sign was noted. The left kidney was severely dystrophic with cortical remodeling and a minimal amount of color flow signals were present. The cranial pole of the left kidney revealed an expansive hyperechoic nodule, measuring 2.06 cm, likely hyperplasia secondary to degenerative renal disease, however, FNA is indicated to ensure this is not a neoplastic process.

Adrenal Glands

The **adrenal glands** were uniform, yet bilaterally swollen and hypoechoic. This is most consistent with stress-induced hyperplasia. The left adrenal gland measured 0.53 cm.

Spleen

The **spleen** was normal in size and contour with a hypoechoic 0.83 cm nodule at the mid body.

Liver

The **liver** was enlarged with undefined nodular changes and cholelithiasis (nonobstructive). Gallbladder calculi were present. Lobar biliary calculi were noted. The left liver revealed an anechoic cyst, measuring 0.64 cm. The liver revealed age-related changes otherwise.

Gastrointestinal

The **gastrointestinal** presentation revealed mild uniform prominence of the gastric mucosa as well as areas of "ropey" small intestinal wall. Muscularis/mucosal ratio was 1:1. The intestinal submucosa was slightly irregular, thickened and hyperechoic suggestive of low grade, chronic disease. No concerning lymphadenopathy was visible. No evidence of obstruction was present. Chronic inflammatory bowel disease is likely with a low possibility of an early neoplastic event such as lymphoma. Full thickness tissue biopsies via open laparotomy, ideally guided by intraoperative ultrasound in order to obtain the most representative mural sample, would be necessary to rule out this possibility. Intestinal wall thickness measured up to 3.0 mm.

Pancreas

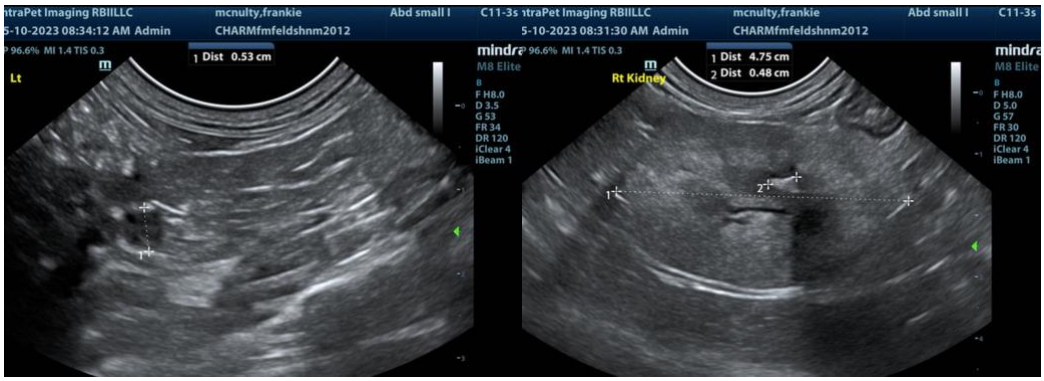
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. The pancreas was enlarged (1.62 cm in the right lobe). Some moderate parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxyphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

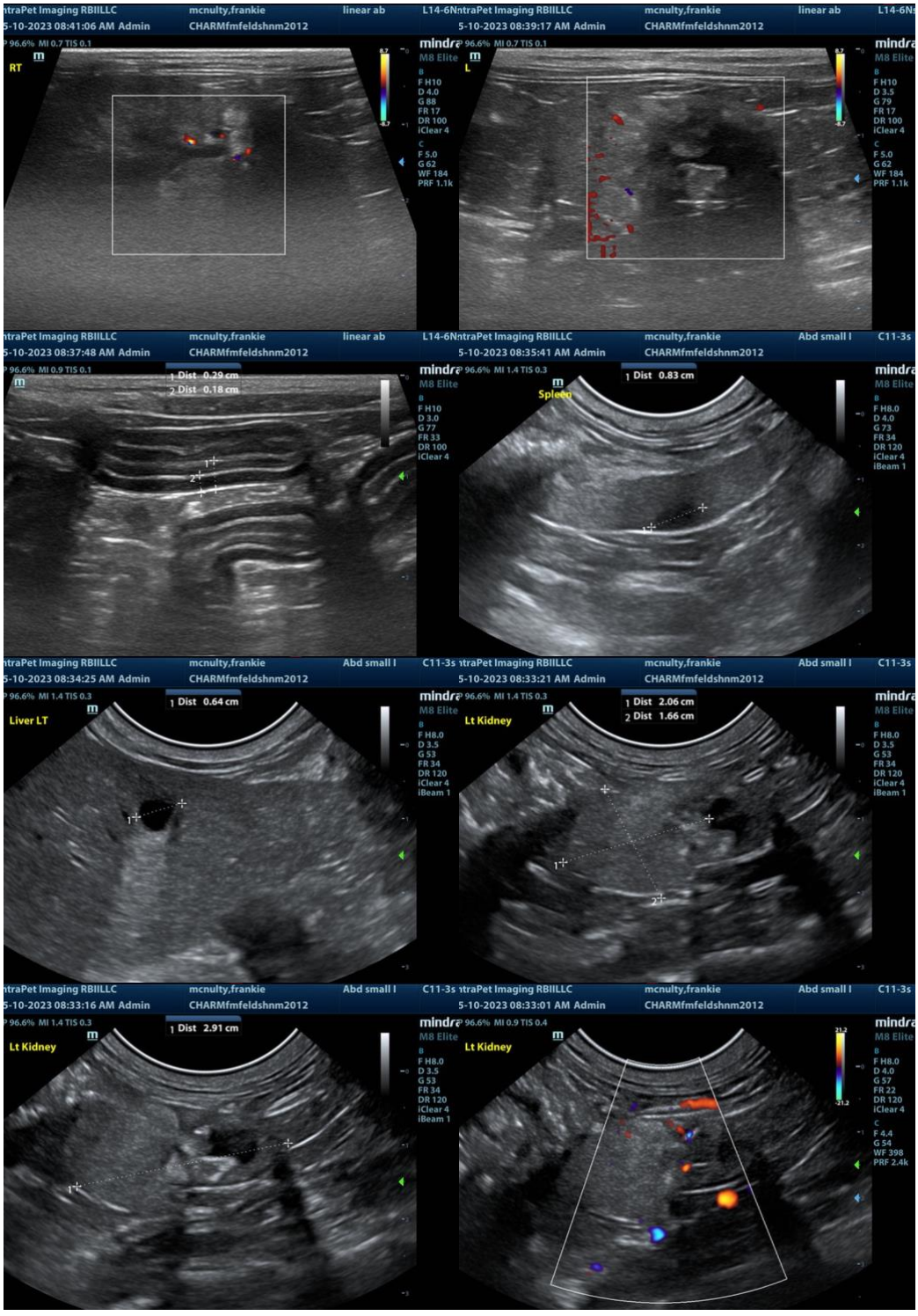
ULTRASONOGRAPHIC FINDINGS

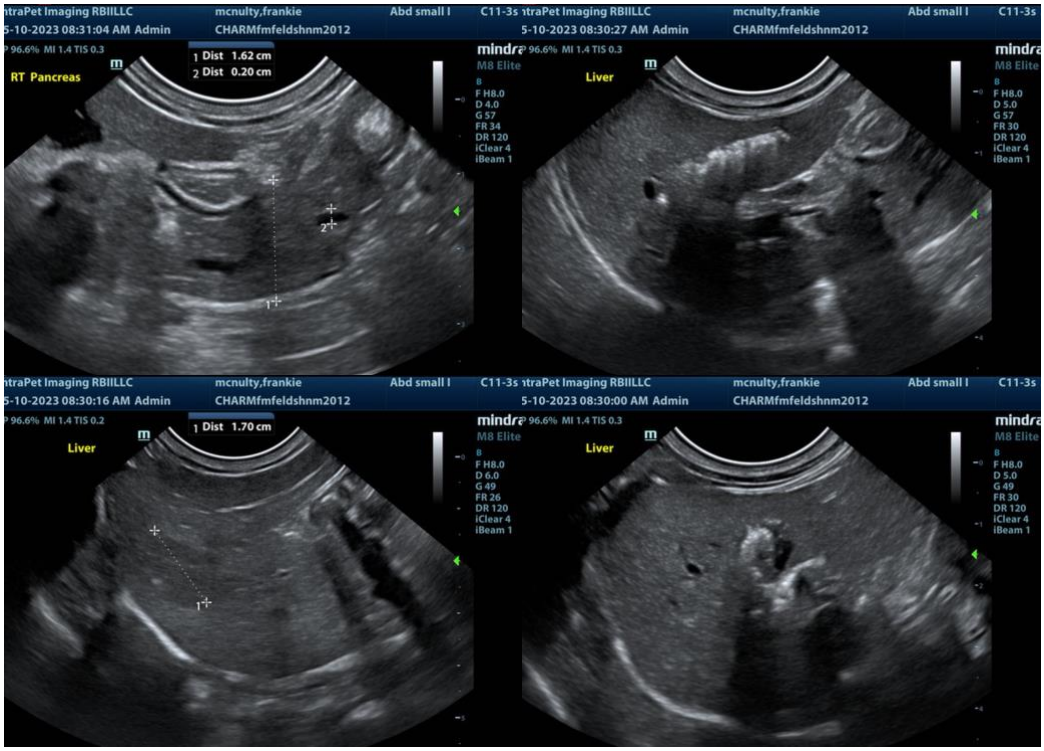
- Moderate to severe renal dystrophy with interstitial nephrosis pattern, infarcts and nephrolithiasis (nonobstructive at the time of the sonogram) with hyperplastic left renal nodule. Minor potential for neoplasia.
- Enlarged liver with undefined nodular changes and cholelithiasis (nonobstructive)
- Diffuse intestinal thickening
- Splenic nodule
- Adrenal gland stress
- Age-related pancreatic changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

General hepatic FNA is warranted, especially in the nodular changes, along with left renal FNA (even though it is unlikely to be neoplastic). Splenic FNA is also warranted given the nodule, to ensure an emerging neoplastic process is not present. Long term viability of the kidneys is in question. Renal values should be monitored very carefully, as well as urinalysis results. Prognosis is guarded. FNA of the spleen and liver is strongly encouraged if any weight loss is an issue.




traPet Imaging RBIILLC mcnulty,frankie linear ab
5-10-2023 08:41:06 AM Admin CHARMfmfeldshnm2012
96.6% MI 0.7 TIS 0.1
RT
mindra M8 Elite
traPet Imaging RBIILLC mcnulty,frankie linear ab
5-10-2023 08:39:17 AM Admin CHARMfmfeldshnm2012
96.6% MI 0.7 TIS 0.1
L
mindra M8 Elite
traPet Imaging RBIILLC mcnulty,frankie linear ab
5-10-2023 08:37:48 AM Admin CHARMfmfeldshnm2012
96.6% MI 0.9 TIS 0.1
1 Dist 0.29 cm
2 Dist 0.18 cm
traPet Imaging RBIILLC mcnulty,frankie Abd small I
5-10-2023 08:35:41 AM Admin CHARMfmfeldshnm2012
96.6% MI 1.4 TIS 0.3
Spleen
1 Dist 0.83 cm
mindra M8 Elite
traPet Imaging RBIILLC mcnulty,frankie Abd small I
5-10-2023 08:34:25 AM Admin CHARMfmfeldshnm2012
96.6% MI 1.4 TIS 0.3
Liver LT
1 Dist 0.64 cm
mindra M8 Elite
traPet Imaging RBIILLC mcnulty,frankie Abd small I
5-10-2023 08:33:21 AM Admin CHARMfmfeldshnm2012
96.6% MI 1.4 TIS 0.3
Lt Kidney
1 Dist 2.06 cm
2 Dist 1.66 cm
mindra M8 Elite
traPet Imaging RBIILLC mcnulty,frankie Abd small I
5-10-2023 08:33:16 AM Admin CHARMfmfeldshnm2012
96.6% MI 1.4 TIS 0.3
Lt Kidney
1 Dist 2.91 cm
mindra M8 Elite
traPet Imaging RBIILLC mcnulty,frankie Abd small I
5-10-2023 08:33:01 AM Admin CHARMfmfeldshnm2012
96.6% MI 0.9 TIS 0.4
Lt Kidney
mindra 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
info@SonoPath.com