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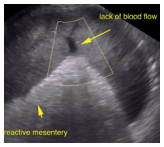
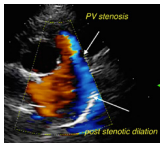
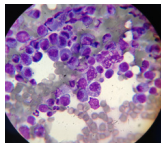
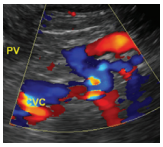
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™





SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Emma Meeker

SPECIES

Canine

BREED

Puggle

SEX

Spayed Female

AGE

12 Years

WEIGHT

16 Pounds

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Jasmine Palacios & Amanda Crook

HOSPITAL NAME

Rivers Edge PMC

REFERRING VET

Dr. Jason Christensen

INVOICE

36798

DATE

4/11/22

PRESENTING CLINICAL SIGNS

P presented for chronic pancreatitis and possible mass in the abdomen based on abnormalities in recent BW. Referral to us for further imaging.
Abnormal PE/Chem/CBC/UA Results: See attached from rDVM: Albumin (2.5g/dL), cPL (376ug/L), Elevated WBC, neutrophils and Bands, low HCT,

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

The left kidney was normal in size and margination. Severe hydronephrosis was present, exhibited by replacement of medullary parenchyma with anechoic fluid extending into the lateral diverticuli. Fluid contained subjective echogenic to hyperechoic debris. Areas of mineralization noted in the area of the left kidney renal sinus and area of proximal left ureter. The left kidney measured 5.2 cm. The right kidney measured 4.8 cm. No evidence of pyelectasia or concurrent hydronephrosis.

Normal size and margination were present in the right kidney. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortex were uniform in texture with some increased echogenicity and loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present.

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

A non-homogeneous, spherical, non-mineralized mass was present in the area of the left adrenal gland, measuring 2.6 cm x 1.7 cm.

The right adrenal gland was overtly normal in size, position and shape, measuring 1.4 cm length x 0.35 cm at the caudal pole.

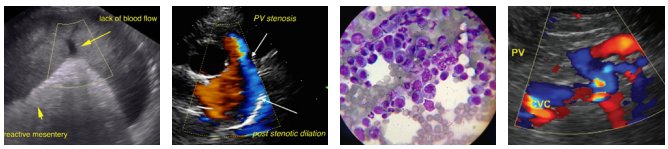
Spleen

The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.

Liver

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. Focal to intermittent, well demarcated, non-disruptive, hyperechoic intraparenchymal nodules were present. Example of hepatic nodule measured 0.82 cm in diameter (present in the right lateral to caudate lobe). The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non distended in size with mild, echogenic, nonmineralized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.

Gastrointestinal



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The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained variable echogenic, nonshadowing ingesta most consistent with post prandial presentation without signs of ileus, obstruction or foreign material.

The small intestine presented primarily intact wall layering with maintained 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. Segments of the small intestine with suspected jejunal location exhibited moderate to variable mural hypertrophy, decreased mural echogenicity, and loss of discernable wall layering, measuring approximately 3.0 cm in diameter with wall width up to 0.52 cm. Associated segmental metabolic to paralytic intestinal ileus present within the area of abnormal intestinal. Regional peri intestinal hyperechoic mesentery and small pockets of scant free fluid present. Evidence of significant peri intestinal lymphadenopathy was not visualized, yet mild or non-obvious lymphadenopathy possible, given regional increased omental artifact. Areas of focal mild mural hypertrophy possibly noted in adjacent small intestinal segments.

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

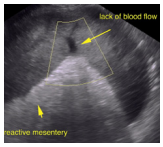
The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

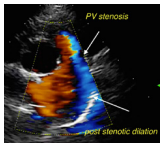
ULTRASONOGRAPHIC FINDINGS

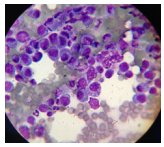
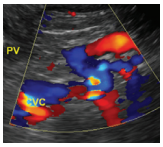
- Left kidney moderate to severe hydronephrosis with suspect obstructive nephrolithiasis, potential for chronic left kidney pyelonephritis.
- Right kidney mild chronic renal changes
- Non-homogeneous mass in area of left adrenal gland – functional/non-functional adenoma, hyperplasia, neoplasia (i.e., pheochromocytoma, adenocarcinoma), or other. Potential for non-adrenal omental nodule or overlaying lymph node cannot be definitively excluded.
- Focal to intermittent non-specific yet subjectively benign hepatic intraparenchymal nodules – suspect lipogranulomas versus nodular/regenerative hyperplasia.
- Mild gallbladder debris
- Heterogeneous pancreas – age related/patient variant, potential for low-grade to chronic pancreatitis.
- Segmental intestinal mural mass with associated regional peritonitis – neoplastic criteria met and favored with non-neoplastic etiologies such as granuloma, inflammation or other possible.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Assessment of systemic blood pressure recommended to evaluate for evidence of hypertension, which may allude to a left adrenal pheochromocytoma. if surgical options are a possibility in this case, abdominal CT for further assessment of the mass in the area of the left adrenal gland as well as further assessment of the intestinal mural mass with further clarification of potential peritonitis versus non-obvious omental metastasis is likely ideal, given this presentation. Otherwise, assuming no pathology on 3-view chest radiographs, laparotomy with gross inspection of the intestinal mural mass, biopsy versus resection and anastomosis, as well as gross inspection of the mass in the area of the left adrenal gland





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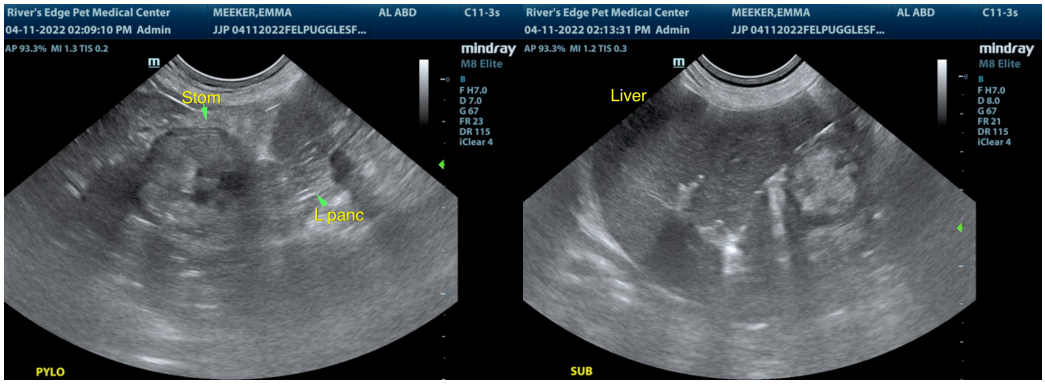
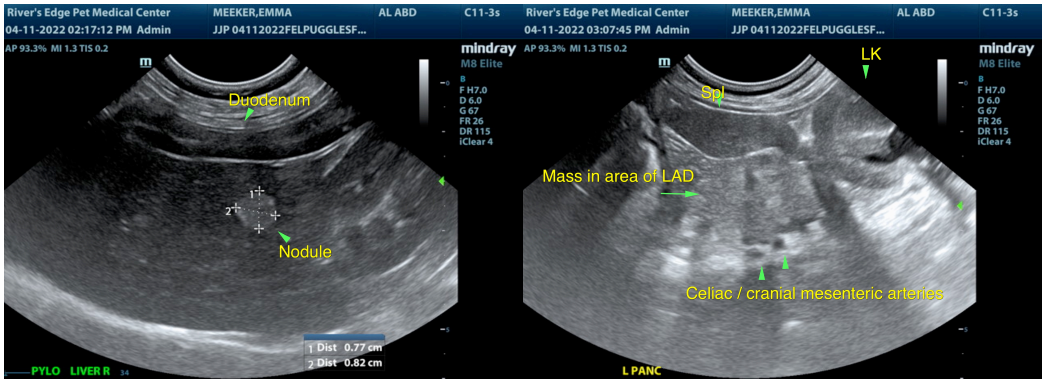
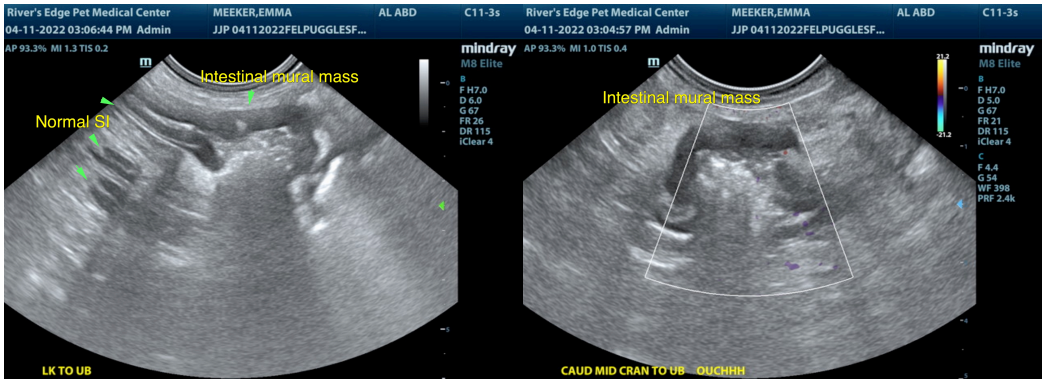
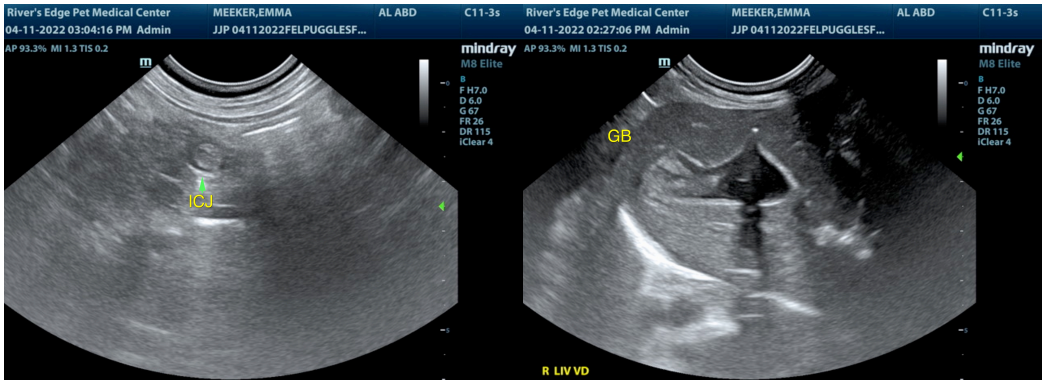
with potential for resection could be considered. Guarded prognosis.









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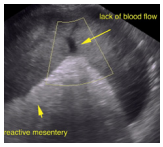

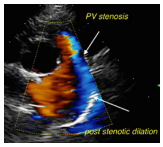

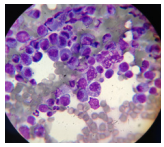
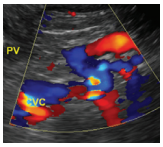

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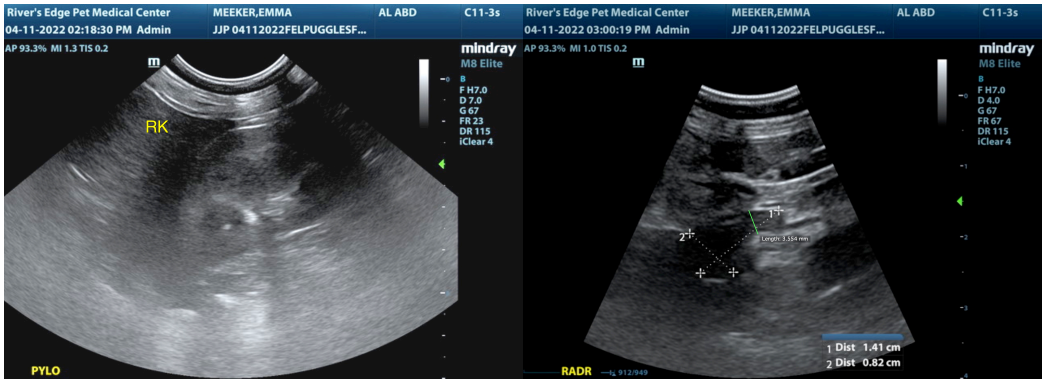

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

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