



**PATIENT PRESENTING CLINICAL SIGNS**

Lulu Kiefer dry heaving, gagging, decreased appetite, lethargy, some blood in bile currently on deramaxx  
Abnormal PE/Chem/CBC/UA Results: stress leukogram, mild non-reg anemia, slightly low PCV, abnormal snap cPL, chem-unremarkable

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

**BREED**

Lab

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.

**SEX**

Spayed Female

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices 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 right kidney measured 8.4 cm. The left kidney measured 8.4 cm.

**AGE**

12 Years

**Adrenal Glands**

**WEIGHT**

35 kg

The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The right adrenal gland measured 2.5 cm length x 0.61 cm at the caudal pole. The left adrenal gland measured 2.7 cm length x 0.72 cm at the caudal pole.

**Spleen**

**INTERPRETED BY**

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

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. 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. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age related remodeling with minor potential for inflammatory or neoplastic disease.

**IMAGING PERFORMED BY**

Kelly Reschny

**Liver**

**HOSPITAL NAME**

Preston AC

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. The hepatic and portal vasculature were normal in appearance without signs of congestion. A moderately sized, asymmetrically marginated to expansive non-homogeneous mass appeared to occupy the majority of the mid to right lateral and potential caudate liver. The mass measured approximately 10 cm x 9 cm. The mass appeared to extend into the area of the porta hepatis and was noted directly adjacent to the gallbladder. 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. No evidence of post-hepatic obstruction.

**REFERRING VET**

Dr. Coghlan

**INVOICE**

24630

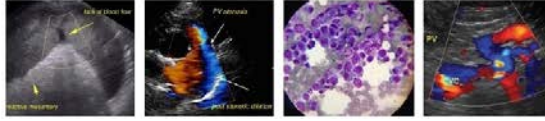
**Gastrointestinal**

The stomach presented wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. Mild to moderate retained anechoic fluid was present. Gastric body wall measured 0.46 cm.

**DATE**

8/13/21

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.



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

Lulu Kiefer **Pancreas**

**SPECIES** The pancreas was mildly prominent in size (specifically in the right pancreatic limb) and normal in contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

Canine

**Free Abdomen**

**BREED**

Mild, primarily perihepatic free fluid as well as mild reactive perihepatic mesentery noted primarily around the hepatic mass.

Lab

**PRIMARY FINDINGS**

**SEX**

- Mid to right non-homogeneous to expansive hepatic mass
- Gastritis with suspect gastric stasis
- Associated perihepatic free fluid and generalized reactive mesentery
- Prominent to heterogeneous right pancreas – potential for concurrent mild to chronic active inflammation.

Spayed Female

**AGE**

12 Years

**WEIGHT**

35 kg

**SECONDARY FINDINGS**

- Bilateral mild chronic renal changes

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

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Feline)

Although sampling is required for further clarification, the hepatic mass is most consistent with probable neoplasia (i.e., adenocarcinoma or other). The mass being located in the area of the stomach and potential pyloric outflow may indicate some degree of metabolic or potential mechanical or partial pyloric outflow or possible secondary gastric irritation, which may result in the patient's dry heaving, gagging, and decreased appetite.

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Obvious evidence of gastric ulceration was not noted, yet potential for microulceration (given the reported blood and the bilious vomit) cannot be definitively excluded. Assuming normal clotting status, hepatic mass FNA may be considered. Some or all of the following protocol may be considered empirically. Subjectively, the hepatic mass does not appear to be amenable to surgical resection given its size, location and likely extension into the area of the porta hepatis.

**HOSPITAL NAME**

Preston AC

**Helicobacter/Gastritis protocol**

A clinical trial of **Zithromax** (Dogs: 5-10 mg/kg p.o. q24h. May increase dosing interval to q48h after 3-5 days of treatment), **Metronidazole** (10-20 mg/kg p.o. b.i.d.), **Pepcid** (0.5-1 mg/kg s.i.d.) and **Sucralfate** (0.5-2 g/dog PO) or **Omeprazole** (1 mg/kg p.o. s.i.d.) over the next 3 weeks along with a **novel-protein or hydrolyzed diet** with slurry feeding b.i.d./t.i.d. over the next 2-4 days and then increase to canned diet bid. Dry food should be avoided over the next 4 weeks. A recheck sonogram to assess GI improvement or progression would be ideal in 4 weeks.

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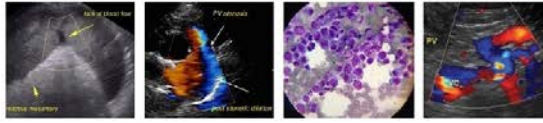
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**PATIENT**

Lulu Kiefer

**SPECIES**

Canine

**BREED**

Lab

**SEX**

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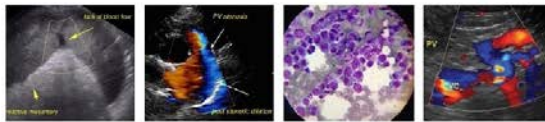
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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