

**PATIENT**

Tux Werner

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered Male

AGE

17 Years

WEIGHT

12.8 Pounds

INTERPRETED BYR. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)**IMAGING PERFORMED BY**

Amy Mayhew, LVT

HOSPITAL NAME

SVS Imaging Michigan

REFERRING VETWixom Family Pet
Practice**INVOICE**

33949

DATE

1/4/22

PRESENTING CLINICAL SIGNS

Presented for distended abdomen. Recently noted by owner. Owner noted recent decrease in amount of urine/stool production. Still eating normally. No V/D.

Abnormal PE/Chem/CBC/UA Results: Amylase elevated 1831 Magnesium elevated 3.3 BUN elevated 38.2 Neutrophils mildly elevated 12.78 FELV/FIV NEGATIVE

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of – 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.

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 mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The kidneys measured 4.1 cm each.

Adrenal Glands

No overt pathology in the area of the left and right adrenal glands, although not definitively visualized given the degree of peritoneal effusion.

Spleen

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The spleen measured 0.77 cm in width. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. The capsule was smooth and regular without apparent expansion. No evidence of masses. 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.

Liver

The liver exhibited subjective mild to potential moderate generalized enlargement. The parenchyma of the liver was subjectively increased in echogenicity compared to the spleen and renal cortices. The echotexture of the liver parenchyma was uniform with a mild coarse echotexture. The capsule of the liver was symmetrical in margination. No overt evidence of hepatoportal vascular congestion. The gallbladder was non-distended in size with mild debris. The debris is incidental, potentially owing to decreased food intake or fasting, or potential non-clinical cholestasis. No evidence of gallbladder wall edema. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material. Gastric body wall measured 0.26 cm.

The visualized 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. Jejunum wall measured 0.24 cm.

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



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Pancreas

The left limb, right limb, and base of the pancreas presented hypoechoic to heterogeneous echogenicity compared to adjacent omental fat. Mild asymmetrical capsule margination was present with mild variable parenchymal swelling and mild peripancreatic inflammation. No overt evidence of neoplasia. The mesentery exhibited generalized subtle, non-uniform increased echogenicity. No overt evidence of omental masses or lymphadenopathy. Moderate to severe volume, primarily anechoic peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

- Moderate to severe volume primarily anechoic peritoneal free fluid and generalized mild non-uniform reactive mesentery.
- Mild chronic renal changes
- Mild hepatomegaly exhibiting generalized mild parenchyma hyperechogenicity
- Mildly prominent to hypoechoic left pancreas

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Recommend abdominocentesis, cytospin/cytology to conserve integrity of any potential cells within the fluid. Culture of the fluid could also be considered if evidence of inflammatory cells are noted. Given that no subnormal albumin levels that would diminish oncotic pressures to the point of causing free fluid, as well as no overt evidence of structural gastrointestinal pathology (i.e., masses, perforation or other).

Considerations for the underlying cause of the free fluid may include hepatic disease (even though no evidence of reported hepatic enzyme elevations given the short half-life of hepatic enzymes in cats), pancreatitis, or potential lymphatic obstruction owing to neoplastic process such as carcinomatosis, lymphomatosis, or similar. Subjectively, the degree of pancreatic inflammation (if present) was not overtly consistent with that which would typically result in peritoneal effusion.

Assuming normal clotting status, ultrasound guided FNA of the liver (pending effusion analysis) could be considered for screening cytology. FIP is technically a potential, yet given the age of the patient, is thought less likely. If not done, 3-view chest radiographs are suggested to rule out occult thoracic pathology and assess cardiopulmonary status.



IMAGING PERFORMED BY

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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.

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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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