



PATIENT PRESENTING CLINICAL SIGNS

PATIENT Mia Urbina Vomiting, ADR. High liver values. Checking for masses/mets jaundice severely? Findings: 3-view thoracic and abdominal radiographs are available for review (638 images). THORAX: Mild sternal lymphadenopathy is suspected (cranial thorax not well included on the VD view). The lungs are well inflated and likely have diffusely normal opacity, considering patient age (assumed old patient; signalment is not provided). No soft tissue-opaque pulmonary nodules. Numerous tiny, mineral opaque, slightly irregular pulmonary nodules are noted with a predominantly ventral distribution, most consistent with incidental ossifying metaplasia. The cardiovascular structures, pleural space and mediastinum are within normal limits. The esophagus contains a small amount of luminal gas, likely aerophagia. Deep to the skin, moderately large fat accumulations are present. At the right-cranio-dorsal body wall the soft tissues appear swollen and have small subcutaneous gas bubbles. The shoulders have chronic osteoarthritis. ABDOMEN: The hepatic silhouette appears upper normal size with mildly rounded margins. On the VD view there is the impression of a rounded soft tissue opaque mass (~6 cm) in the left caudal abdomen, not as well seen on other views. The gastrointestinal tract has diffusely normal size, course and content. Serosal detail is within normal limits. The visible splenic, renal and urinary bladder silhouettes are within normal limits. Assessment: 1. Possible mild sternal lymphadenopathy vs. retrosternal/mediastinal fat deposition and/or superimposition artefact from thoracic limbs - if real, may be attributable to cranial peritoneal or ventral body wall pathology (e.g. reactive hyperplasia, regional metastasis) 2. The results of this evaluation are negative for pulmonary metastasis 3. Craniodorsally thoracic body wall swelling with subcutaneous gas - may be attributable to recent subcutaneous injection, however a mass is possible (e.g. abscess/cellulitis) 4. Possible mild generalised hepatopathy - Ddx is broad and includes benign etiologies (e.g. vacuolar hepatopathy, hyperplasia, hepatitis, congestion), as well as malignancy (e.g. lymphoma, hepatocellular carcinoma). 5. Questionable mass in the left caudal abdomen (e.g. splenic tail origin, reproductive tract origin, intestinal, other) vs. superimposition artefact COMMENTS: Specialist abdominal ultrasonography or contrast enhanced trunk CT is recommended to further evaluate, with liver tissue sampling as indicated. The results of this evaluation are negative for gastrointestinal mechanical obstruction at this time. Consideration may be given to a diffuse gastroenteropathy (e.g. non-specific gastroenteritis, secondary to extra-GIT disease).

SPECIES Canine

BREED Husky

SEX FS

AGE 12 Years

WEIGHT 66 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Loetitia Saint-Jacques, RVT

HOSPITAL NAME

Donner Truckee
Veterinary Hospital

REFERRING VET

Dr. Vannini

Abnormal PE/Chem/CBC/UA Results: GLU = 91 mg/dL 70 - 143 : | : CREA = 0.8 mg/dL 0.5 - 1.8 : | : BUN = 9 mg/dL 7 - 27 : | : BUN/CR = 11 PHOS = 4.6 mg/dL 2.5 - 6.8 : | : Ca = 9.1 mg/dL 7.9 - 12.0 : | : TP = 8.2 g/dL 5.2 - 8.2 : | ALB = 3.2 g/dL 2.2 - 3.9 : | : GLOB = 5.0 g/dL 2.5 - 4.5 : | : HIGH ALB/GL = 0.6 ALT --- U/L 10 - 125 ALKP = 1199 U/L 23 - 212 : | : HIGH GGT = 14 U/L 0 - 11 : | : HIGH TBIL = 12.0 mg/dL 0.0 - 0.9 : | : HIGH CHOL = 410 mg/dL 110 - 320 : | : HIGH AMYL = 826 U/L 500 - 1500 : | : LIPA = 653 U/L 200 - 1800 : | : Sodium = 157 mmol/L 144 - 160 : | : Potassium = 4.5 mmol/L 3.5 - 5.8 : | : Na/K = 35 Chloride = 110 mmol/L 109 - 122 | : OSM ca = 309 mmol/kg RBC = 5.78 M/uL 5.65 - 8.87 | : HCT = 32.6 % 37.3 - 61.7 | : : LOW HGB = 12.2 g/dL 13.1 - 20.5 | : : LOW MCV = 56.4 fL 61.6 - 73.5 | : : LOW MCH = 21.1 pg 21.2 - 25.9 | : : LOW MCHC = 37.4 g/dL 32.0 - 37.9 : | RDW = 15.8 % 13.6 - 21.7 : | : %RETIC = 0.8 % RETIC = 47.4 K/uL 10.0 - 110.0 : | : RETHGB = 23.2 pg 22.3 - 29.6 : | : WBC = 7.23 K/uL 5.05 - 16.76 : | : %NEU = 71.3 % %LYM = 9.7 % %MONO = 18.3 % %EOS = 0.4 % %BASO = 0.3 % NEU = 5.16 K/uL 2.95 - 11.64 : | : LYM = 0.70 K/uL 1.05 - 5.10 : | : LOW MONO = 1.32 K/uL 0.16 - 1.12 : | : HIGH EOS = 0.03 K/uL 0.06 - 1.23 | : : LOW BASO = 0.02 K/uL 0.00 - 0.10 : | : PLT = 342 K/uL 148 - 484 : | : MPV = 10.3 fL 8.7 - 13.2 : | : PDW = 8.7 fL 9.1 - 19.4 | : : LOW PCT = 0.35 % 0.14 - 0.46 : | :

ALT-not read, ALP 1199, GGT 14, Total bilirubin 12, Hematocrit 32.6, Retic 47.4, WBC 7.23, PLT 342

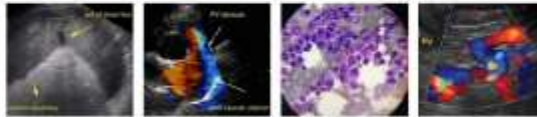
ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

INVOICE *Urinary System*

47644 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.

DATE

10-4-21



PATIENT No evidence of pathology in the area of the aortic trifurcation.

Mia Urbina Normal size and margination was 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 left kidney measured 8.0 cm in length. The right kidney measured 7.8 cm in length.

SPECIES

Canine

Adrenal Glands

BREED

Husky

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.6 cm length x 0.83 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 2.7 cm length x 0.64 cm width at the caudal pole.

SEX

FS

Spleen

AGE

12 Years

The spleen exhibited subjective mild generalized enlargement and a primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present. A focal nonexpansive hypoechoic medial parenchymal nodule was present. 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.

WEIGHT

66 lbs

Liver / Gallbladder

INTERPRETED BY

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

The liver exhibited subjective mild generalized enlargement. The hepatic parenchyma revealed diffuse reduced echogenicity compared to the spleen and renal cortical parenchyma with a mild coarse echotexture. Increased portal vein prominence was evident. The capsule of the liver was normal in margination. Distinct masses or nodules were not evident. The hepatic and portal vasculature were normal in appearance.

IMAGING PERFORMED BY

Loetitia Saint-Jacques, RVT

The gallbladder exhibited mild dilation with mild to moderate nondependent yet nonorganized uniformly echogenic luminal debris. The common bile duct exhibited moderate dilation to the level of the duodenal papilla measuring 1.0 cm in diameter. Overt evidence of common bile duct calculi or mucus or overt obstructive pathology at the level of the duodenal papilla was not definitively evident.

Gastrointestinal

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The stomach exhibited regional mild mural hypertrophy with subjective mild decreased mural echogenicity and indistinct wall layering primarily in the ventral gastric body. The gastric body wall measured 0.75 cm width. Mild retained echogenic fluid and chyme were present in the stomach.

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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.

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

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Pancreas

The mid to left pancreas exhibited moderate enlargement with symmetrical yet swollen contour and uniformly mildly hypoechoic parenchyma. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

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Free Abdomen



PATIENT Multiple variably sized mesenteric and focal medial iliac lymph nodes were present. The lymph nodes exhibited symmetrical to rounded margination with abnormal width: length ratio (>0.5). The enlarged lymph nodes were bordered by echogenic to reactive mesentery. An example of a mesenteric lymph node measured 3.1 x 2.2 cm and an example of a medial iliac lymph node measured 2.6 x 1.0 cm.
Mia Urbina

SPECIES Regional perilymphatic, peripancreatic, and perigastric omental reactivity was present with scant pockets of peritoneal free fluid.
Canine

ULTRASONOGRAPHIC FINDINGS

BREED • Hepatopathy - subjectively acute to acute on chronic, hepatitis, reactive hepatopathy, cholestasis, congestion, or occult neoplasia possible.
Husky

SEX • Common bile duct dilation to the level of the duodenal papilla - inflammation or nonobvious obstruction possible.
FS

AGE • Swollen to mildly hypoechoic left pancreas - concurrent active to chronic active pancreatitis possible.
12 Years

WEIGHT • Subjective mild splenomegaly with generalized parenchyma heterogeneity and nonspecific medial parenchyma hypoechoic nodule.
66 lbs

• Regional mild gastric mural hypertrophy and probable gastric stasis - concurrent gastritis or potential emerging mural neoplasia possible.

• Multifocal variably sized to swollen hypoechoic mesenteric and focal medial iliac lymph nodes - significant hyperplasia, lymphadenitis, or neoplasia.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Pending splenic cytology, ultrasound guided FNA of enlarged mesenteric lymph node as well as the liver, assuming normal clotting status, warranted for screening cytology. Potential multicentric neoplastic process is favored in this case although not definitive.

IMAGING PERFORMED BY

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Empirical therapy for acute to acute on chronic cholangiohepatitis including broad spectrum antibiotics, hepatosupportive medications with gastrointestinal support, and monitoring of hepatic enzymes and clinical response is recommended.

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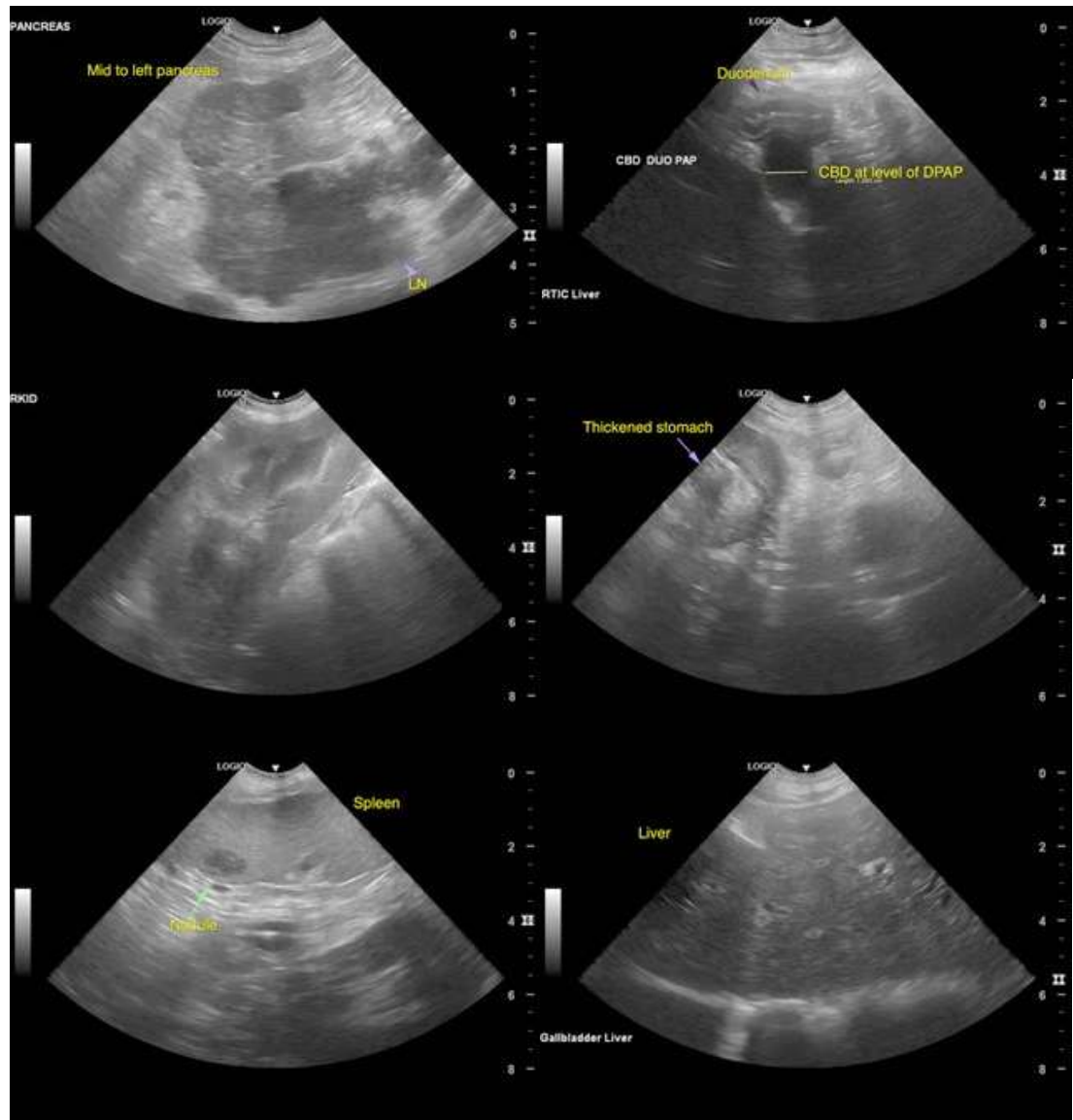
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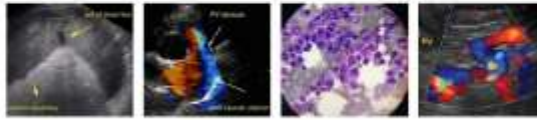
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PATIENT

Mia Urbina

SPECIES

Canine

BREED

Husky

SEX

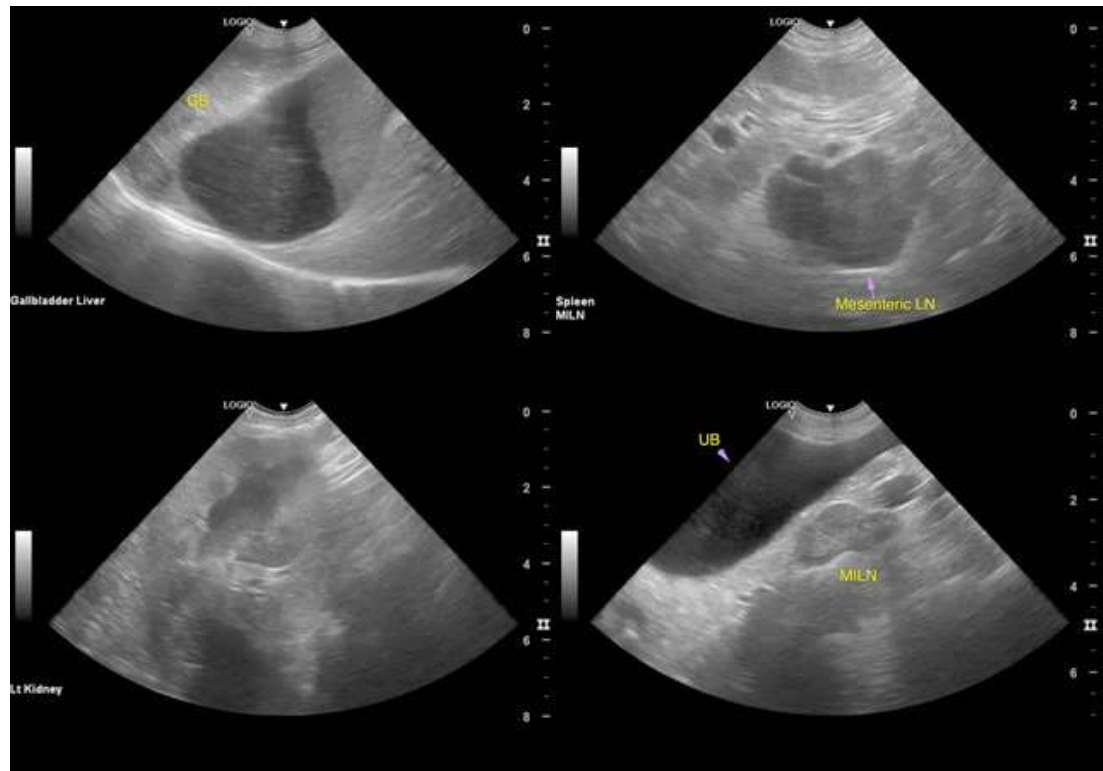
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com