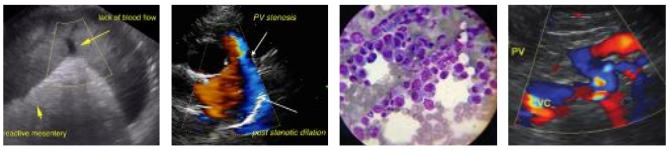
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
Mikey Kraus

SPECIES
Canine

BREED
Golden Retriever

SEX
Neutered Male

AGE
7 y ears 10 mos

WEIGHT
71.6 lbs

INTERPRETED BY
Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY
Carissa Rhoades

HOSPITAL NAME
Elizabeth Animal Hospital

REFERRING VET
Kim Allyn, DVM

INVOICE
10227

DATE
1/27/22

PRESENTING CLINICAL SIGNS

History: Always licking his lips, a lot. Seemed like his lips were swollen last night. Ate his food great last night and was drinking a lot of water as well. Didn't really want to eat his food this morning but finally eat it. Also has been having a hard time swallowing his food last night. Did take x-rays of the abdomen yesterday. 1-26-2022
Abnormal PE/Chem/CBC/UA Results: PE: he looked and seemed great. CBC: RDW 14.4 % Neutrophils 12.92 K/µL Eosinophils 0.08 K/µL CHEM: Chloride105mmol/L ALT 384 U/L ALP 340 U/L GGT 55U/L Bilirubin - Total1.1mg/dL

The severe gastric distention inhibits complete evaluation of the cranial abdomen.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder is distended. A scant amount of suspended echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The prostate is not definitively visualized due to its pelvic location.

The left kidney presented normal size (7.01 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is subjectively normal size; normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with normal corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.71 cm at cranial pole) (0.74 cm at caudal pole) (2.34 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The region of the right adrenal gland is evaluated. The gland is is not definitively visualized. No obvious pathology is observed in this region. However, the area is difficult to fully evaluate due to the severe gastric distention.

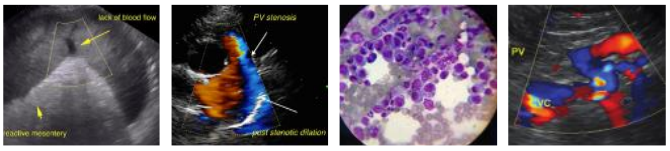
Spleen

The spleen is normal in size (1.67 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of



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suspended echogenic debris is observed within the lumen. The cystic and common bile ducts are normal.

Gastrointestinal
The gastric lumen is over-distended with ingesta and a small amount of fluid. The gastric wall is normal in thickness with a normal layering pattern. The pyloric outflow tract appears patent, although it is difficult to fully visualized this region due to the severe gastric distention. The proximal duodenal lumen is mildly dilated. The remaining small intestinal lumen is empty. The small intestinal wall thickness is normal (with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive or overt infiltrative disease is noted.

Pancreas
A portion of the pancreas is obscured by the severe gastric distention. In the visualized portions, no obvious pathology is observed.

Free Abdomen
The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

Other
A brief echocardiogram reveals no evidence of pericardial effusion.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The presence of ingesta in the gastric lumen despite fasting is suggestive of delayed gastric emptying.
- An obvious cause for the elevated liver enzymes is not identified in the study. However, a microscopic hepatopathy (i.e., bacterial cholangiohepatitis, Leptospirosis, chronic active hepatitis, copper-associated hepatotoxicity, infiltrative neoplasia (less likely)) cannot be excluded.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the elevated liver values, consider the following:
  1. Pre-and postprandial serum bile acids
  2. Leptospirosis testing (i.e, blood-in-urine PCR, serology)
  3. Cytologic evaluation of the liver should be considered in this patient if clotting status is appropriate. A fine needle aspirate using a 25-gauge needle is recommended. If cytologic evaluation is inconclusive, consider a surgical liver biopsy with aerobic and anaerobic bile cultures and acquisition of additional hepatic tissue samples for copper quantitation.
  4. If a conservative approach is desired, consider empirical treatment for bacterial cholangiohepatitis (amoxicillin-clavulanic acid, Denamarin Advanced). If no improvement in the liver values is seen within 7-10 days of initiating therapy, antibiotics should be discontinued, and hepatic tissue sampling reconsidered. If liver values improve, continue therapy for at least 4-6 weeks and 1 week beyond normalization of the liver values.

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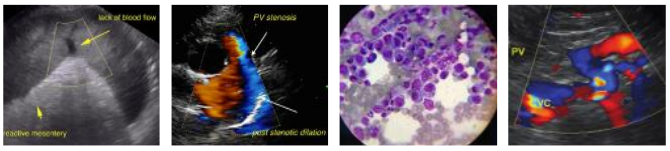

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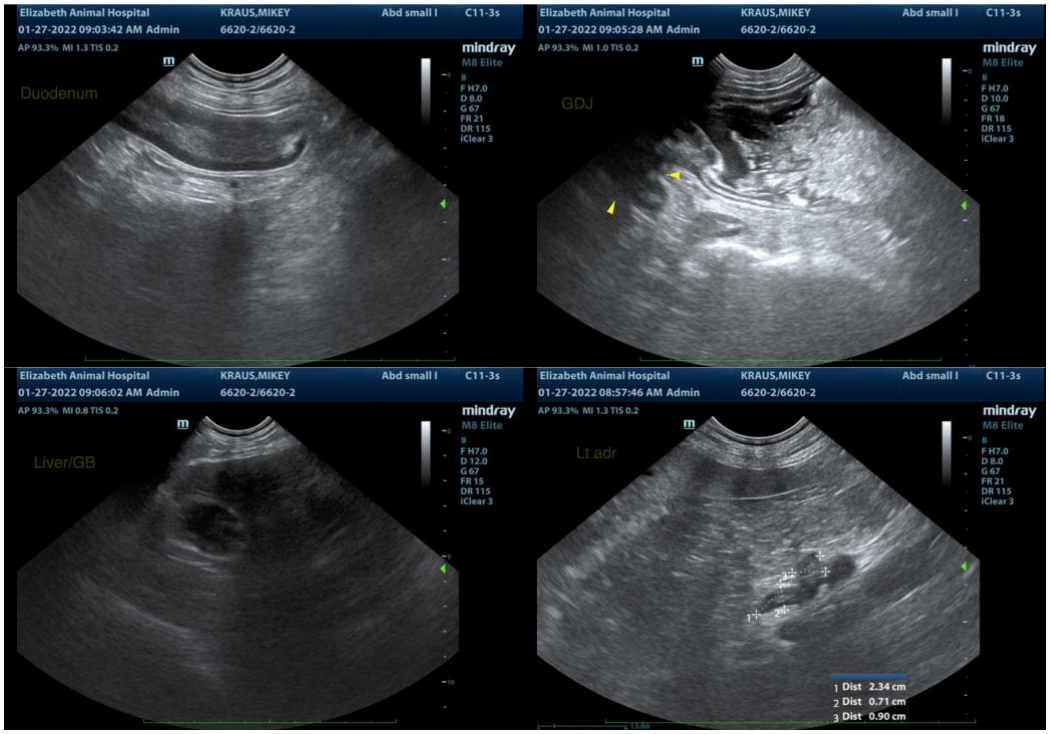
- Regarding the dysphasia consider the following:
  1. Three-view thoracic radiographs to assess for esophageal disease
  2. If the symptoms persist, a barium esophogram (when patient is more stable) +/- upper GI endoscopy may be warranted.



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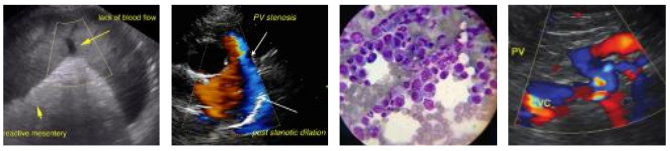

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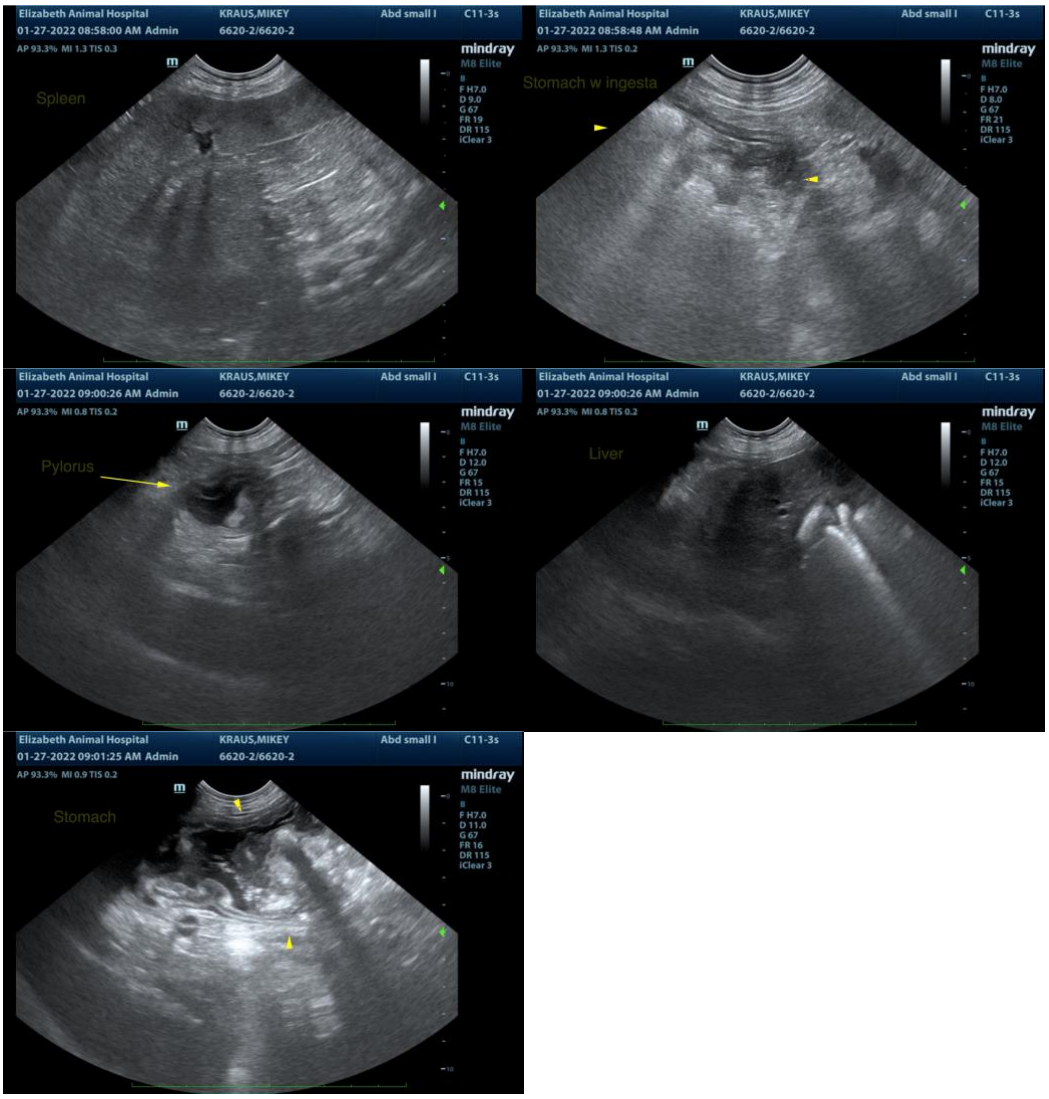

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Andrea Nicastro, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
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