SonoPath
Clinical Sonography & Telecytology
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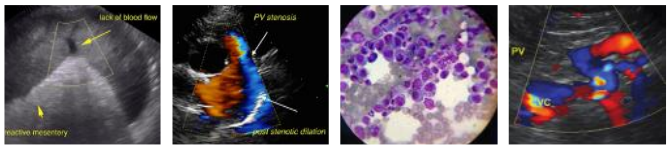


SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Kulfi Krishnan

SPECIES

Canine

BREED

Shepherd Mix

SEX

FS

AGE

10m

WEIGHT

24.9kg

INTERPRETED BY

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

IMAGING PERFORMED BY

JSS

HOSPITAL NAME

King Hopkins Pet Hospital

REFERRING VET

Dr. Black

INVOICE

12018ag

DATE

10/27/2022

PRESENTING CLINICAL SIGNS

Kulfi is a 10m old German shepherd mix who has come to clinic again (was here earlier @ ~1am) states that Kulfi has no interest in food and seems very uncomfortable trying to lay down. O also mentioned that Kulfi continuously woke up in the night to pant and whine which is very abnormal for P. Seeking further diagnostics after declining majority of diagnostics earlier. Hx of eating foreign object but O stating nothing that she believes would cause obstruction. O not stating any specific item that has been ingested. E/D - Refusing food V/D - 1st O stated there was a small puddle of vomit following cerenia, 2nd O states no vomiting following cerenia. No other complaints conveyed to O at this time.

Abnormal PE/Chem/CBC/UA Results: Recommended radiographs 2-3 views - O approved Result: Food in stomach, moderate gas pocket(s) Recommended Profile II BW - O approved Result: NEU 14.91 x10^9/L 2.95 - 11.64 HIGH EOS 0.05 x10^9/L 0.06 - 1.23 LOW TP > 120 g/L 52 - 82 HIGH ALT 150 U/L 10 - 125 HIGH TBIL 24 µmol/L 0 - 15 HIGH Cl 108 mmol/L 109 - 122 LOW Recommended CPL - O approved Result: Abnormal Recommend rad referral STAT - O approved Result: CONCLUSIONS: A cause of the patient's reported gastrointestinal signs is not determined from this exam. No evidence of radiopaque foreign material or a complete mechanical obstruction is identified. Consider a nonspecific gastroenteritis. RECOMMENDATIONS: Abdominal ultrasound is recommended for further evaluation. If ultrasound is unavailable, consider providing supportive care, including intravenous fluid therapy, and repeating fasted 3 view abdominal radiographs in 8 to 12 hours for reevaluation.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra 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 and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 7.0 cm in length. The right kidney measured 6.2 cm in length.

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

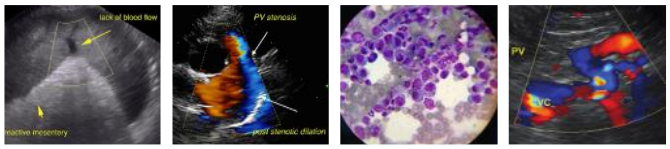
The left and right adrenal glands were not definitively visualized.

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 presented with borderline to mild enlargement. The hepatic parenchyma revealed diffuse reduced echogenicity compared to the spleen and renal cortical parenchyma with a mild coarse



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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. The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact yet prominent potentially thickened wall layering. The lumen of the stomach was primarily empty with a 2 cm area of mild non-specific luminal ingesta. This did not appear to be overtly obstructive to pyloric outflow.

The small intestine presented intact wall layering with segmental mildly prominent muscularis and submucosa layers. Segments of empty small bowel were present along with segmental mild to potentially partial obstructive pattern indicated by mild retained variably echogenic fluid exhibiting mild oral/aboral fluid movement. Segments of intestine exhibited sharp hairpin-like turning and potential for non-obvious plication. A definitive area of intestinal foreign body was not obvious. Peri-intestinal hyperechoic mesentery was present.

The visualized colon appeared to contain semi formed to soft fecal matter with normal colon wall layering.

Pancreas

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

Free Abdomen

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

- Mild yet shadowing gastric ingesta, not overtly obstructive to pyloric outflow
- Intact mildly prominent small intestinal walls with segmental mechanical/metabolic ileus to possible partial obstructive pattern, possible areas of intestinal plication
- Regional peri intestinal hyperechoic mesentery
- Mild hepatopathy-suspect mild reactive or low-grade inflammatory hepatopathy

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Underlying intestinal disease is of concern in this patient while the possibility of non-visualized or passing foreign material as well as non-obstructive gastric foreign material is possible. Recommend hospitalization with IVF support, potential plasma expanders, broad spectrum antibiotics and sonographic reassessment in 18-24 hours to reevaluate intestinal fluid pattern. If exploratory laparotomy is elected for further assessment, intestinal biopsies would be considered essential with gross inspection of the peri intestinal omentum. Endoscopy could be considered an alternative option if available. An anti-parasitic protocol is suggested.

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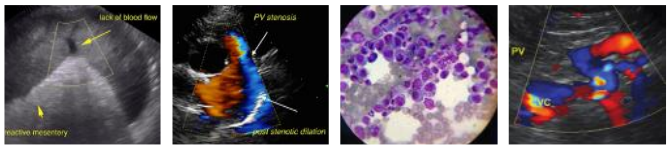

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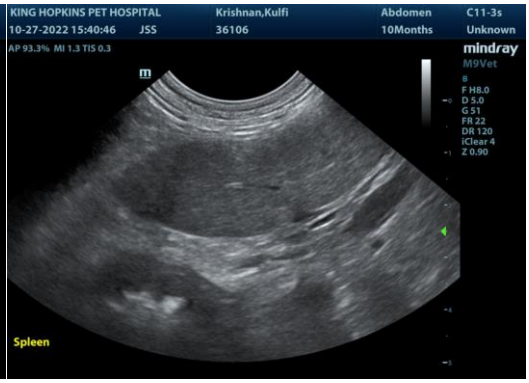

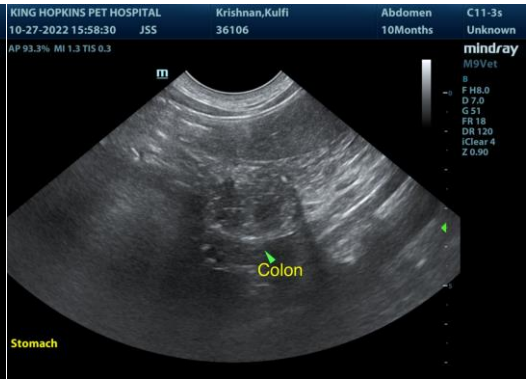

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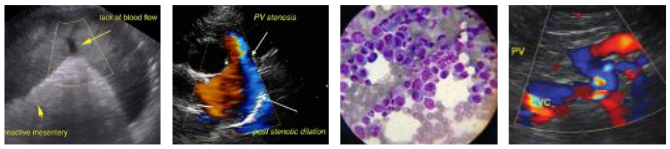

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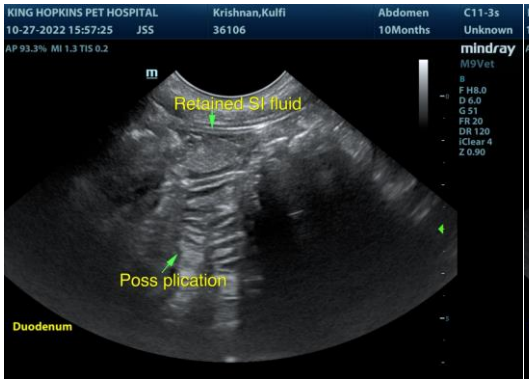

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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