



PATIENT PRESENTING CLINICAL SIGNS

Koda Carel noticed low protein during PCV/TP check before OVH. OVH done 5 days ago. Albumin 1.6. Idexx BW confirm low Globulin and ALbumin. UPC ran in house show no significant Albumin loss via kidneys

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED

Border Collie

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 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 was noted.

SEX

FS

Mild residual inflammation was noted around the uterine remnant. This is likely incidental owing to previous surgery and not overtly indicative of emerging uterine remnant pathology.

AGE

6 years

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 5.5 cm in length. The right kidney measured 5.8 cm in length.

WEIGHT

18.75 kg

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.56 cm width at the caudal pole and 0.52 cm width at the cranial pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.59 cm width at the caudal pole and 0.57 cm width at the cranial pole.

INTERPRETED BY

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

IMAGING PERFORMED BY

Loetitia Saint-Jacques, RVT

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.

HOSPITAL NAME

Roundhill AC

REFERRING VET

Dr. Carl Kelly

Liver/ Gallbladder

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

INVOICE

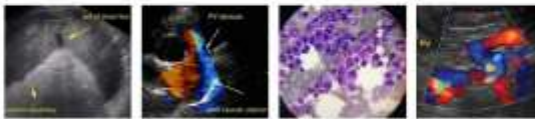
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Gastrointestinal

DATE

2/1/22

The stomach presented intact wall layering with a normal wall layer ratio. Mild to moderate nonshadowing ingesta and mild gas were present.



PATIENT The small intestine exhibited intact wall layering and primarily maintained a 1:3 muscularis/mucosa ratio with segmental propensity for subtle mucosal fogging. The jejunum wall width measured 0.35 cm.
Koda Carel

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

Canine

Pancreas

The right limb of the pancreas exhibited subtle prominent size with mild hypoechoic parenchyma compared to adjacent nonreactive to inflamed omentum.

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Free Abdomen

Focal to intermittent mesenteric lymph nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). An example lymph node measured 2.0 cm x 0.49 cm. No effusion was noted.

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ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Overtly normal small bowel with subjective subtle segmental mucosal fogging
- Gastric ingesta - likely post prandial presentation
- Mildly prominent to hypoechoic right pancreas - nonspecific, potential for low-grade inflammation
- Intermittent reactive / benign mesenteric lymphadenopathy
- Mild regional residual inflammation around uterine remnant

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the lack of reported proteinuria and with normal sonographic presentation of the liver, potential for intestinal protein loss may be a possibility in this case, given the subjective propensity for subtle mucosal fogging in the face of panhyperproteinemia. However, without significant Intestinal mural changes or reported gastrointestinal signs or weight loss, this finding is nonspecific.

Further assessment may include a GI panel to include PLI/TLI/Cobalamin/Folate for further investigation of occult gastrointestinal disease, as well as potential low-grade pancreatitis. If pancreatic inflammation is present, the degree of pancreatic inflammation did not overtly coincide with that which would typically result in hypoalbuminemia. Assessment for evidence of cranial abdominal or subxiphoid discomfort on palpation may be considered. Continued monitoring of protein levels, as well as for emerging GI signs or weight loss is recommended.

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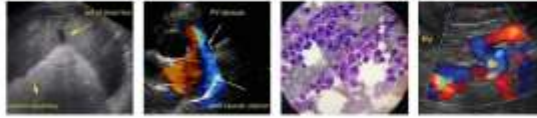
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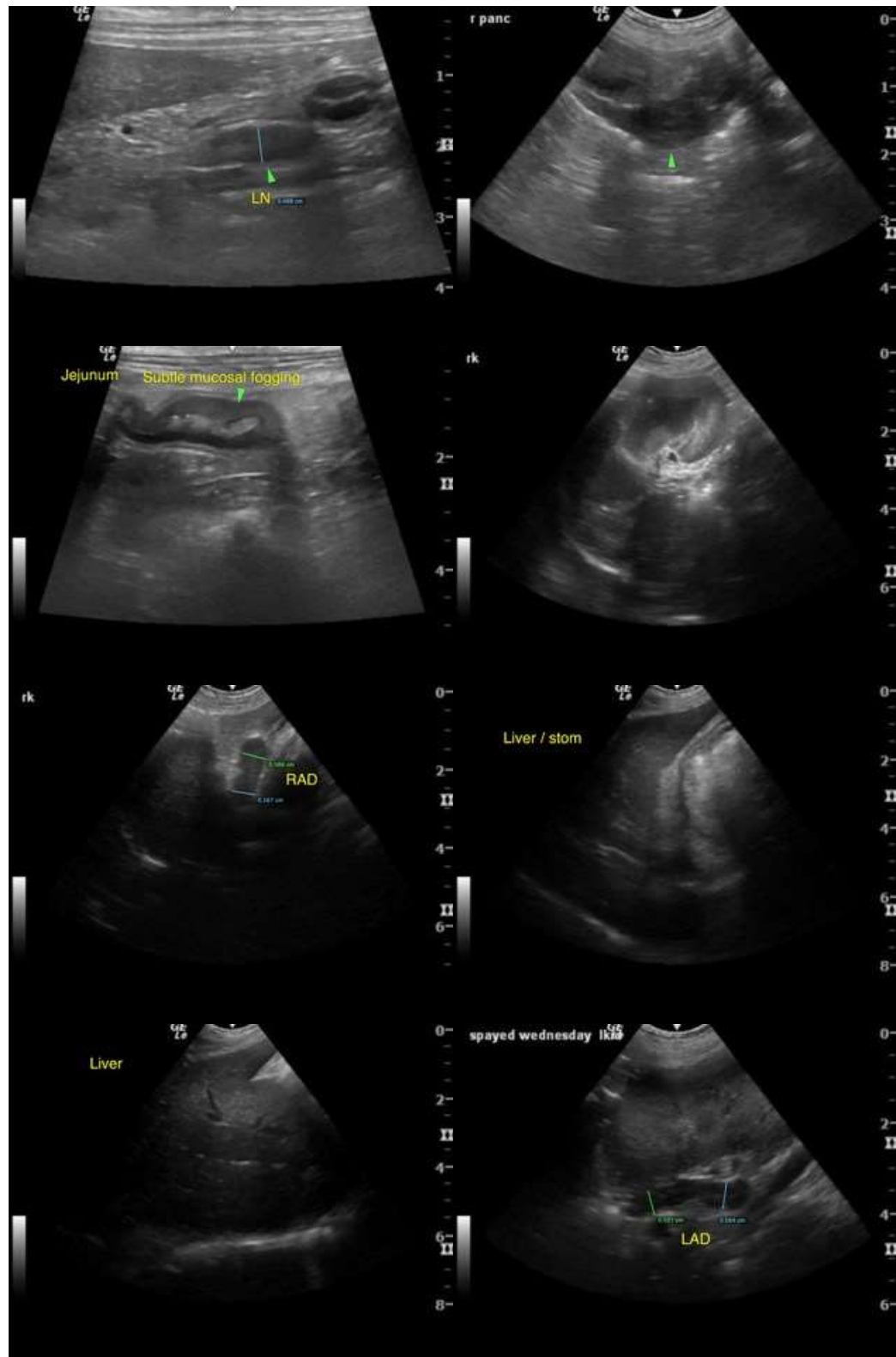
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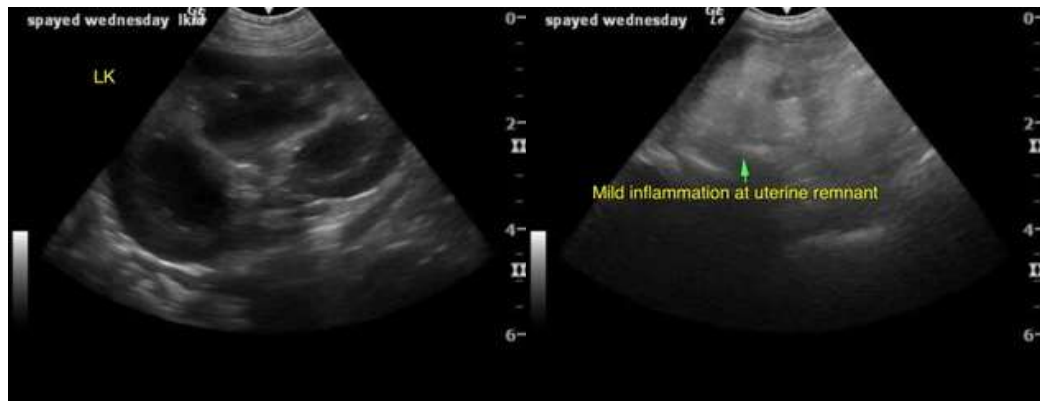
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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