

PATIENT

Joker Jensen

SPECIES

Canine

BREED

Min Pinscher

SEX

Neutered Male

AGE

9 Years 2 Months

WEIGHT

7.3 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Sumeet Sharma

HOSPITAL NAME

Edmonton West AH

REFERRING VET

Sumeet Sharma

INVOICE

21451

DATE

3/5/23

PRESENTING CLINICAL SIGNS

History: Patient was presented one week ago for neck pain and random yelping. No other issue, ED fine, no C/S/V/D, still active. Kept on gabapentin, meloxicam, methocarbamol, responded well. No pain currently and patient is doing all fine. Scan is performed to know pancreatic and liver health. Patient was sedated for u/s exam with Dexmedetomidine and Butorphanol, there was no abdominal pain during u/s exam

Abnormal PE/Chem/CBC/UA Results: On day of exam 24 Feb, NSF on PE, except 7/9 (usually gets heavy in winters) BCS and possible neck pain with slight left front liming and stumbling. (responded well to meds-no issue now) On abd rads (24 Feb)- hepatic silhouette extends beyond the costal arch and has rounded margins. The stomach axis is mildly elevated. Spleen seem bit enlarged. Geri panel - ALT 529 (18-121), GGT 16 (0-13), ALP 966 (5-160), Cholesterol, 11.3 (3.4-8.9), Lipase 881 (0.-250), BUN 11.3 (3.2-11), BG 7.5 (3.5-6.3) T4- 10 (13-53), Free T4 <3.9 (7.7-47.6), TSH 0.16 (0.05-0.6) Spec Cpli 966 (0-200) U/A all normal Reports attached.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for this age patient. Medullary structure differed distinctly from that of the cortex. The right kidney measured 4.25 cm. Slight pyelectasia was noted in the right kidney, measuring 0.19 cm. The left kidney measured 4.37 cm.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 0.5 cm. The right adrenal gland measured 0.64 cm at the cranial pole and 0.42 cm at the caudal pole.

Spleen

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted. Caudal folding of the spleen was noted.

Liver

The **liver** was uniformly swollen. The liver presented coarse architecture with mildly increased portal markings and subtle, mixed echogenic changes. This is consistent with vacuolar hepatopathy and some



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level of remodeling and history of inflammatory component. This is a minor change. The gallbladder was mildly over distended with suspended and dependent debris, yet not to the level of emerging mucocele, yet sludge appears to be mildly excessive. No adjunctive inflammation was noted.

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Gastrointestinal

The **upper gastrointestinal tract** revealed gastric wall thickening with some loss of detail. The colon was unremarkable.

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Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some mild parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxyphoid palpation then low-grade smoldering chronic pancreatitis should be suspected. The right limb of the pancreas measured 8.0 mm.

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Free Abdomen

A hepatic **lymph node** presented normal length to width ratio with slight, swollen contour. There was no loss of parenchymal detail. This is most consistent with reactive lymphadenitis or lymphatic hyperplasia. The hepatic lymph node measured 1.56 cm x 0.74 cm.

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A jejunal **lymph node** presented normal length to width ratio with slight, swollen contour. There was no loss of parenchymal detail. This is most consistent with reactive lymphadenitis or lymphatic hyperplasia. The jejunal lymph node measured 1.33 cm x 0.39 cm.

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ULTRASONOGRAPHIC FINDINGS

- Subjectively benign abdomen with largely age-related metabolic induced issues with reactive lymphadenopathy
- Gastric wall thickening with regional lymphadenopathy, subjectively benign
- Vacuolar hepatopathy with an inflammatory component given the liver profile and regional hepatic lymphadenopathy
- Minor excessive gallbladder sludge
- Age-related renal changes with right kidney pyelectasia
- Age-related pancreatic changes
- Splenic fold

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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Screening FNA of the liver could be considered, however, the lymph nodes may be difficult to access. Ultrasound guided FNA may be challenging in this region given the portal vein presence. Endoscopy



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could be considered, however, would not allow for access to the lymph nodes. Full thickness pyloric wall, liver and lymph node biopsies are recommended in this patient. The spleen will seem enlarged yet it's only a folded position and benign positional variant. There is a possibility of emerging gastric +/- lymph node based neoplasia, however, the lymph nodes do not have neoplastic criteria at the current time.

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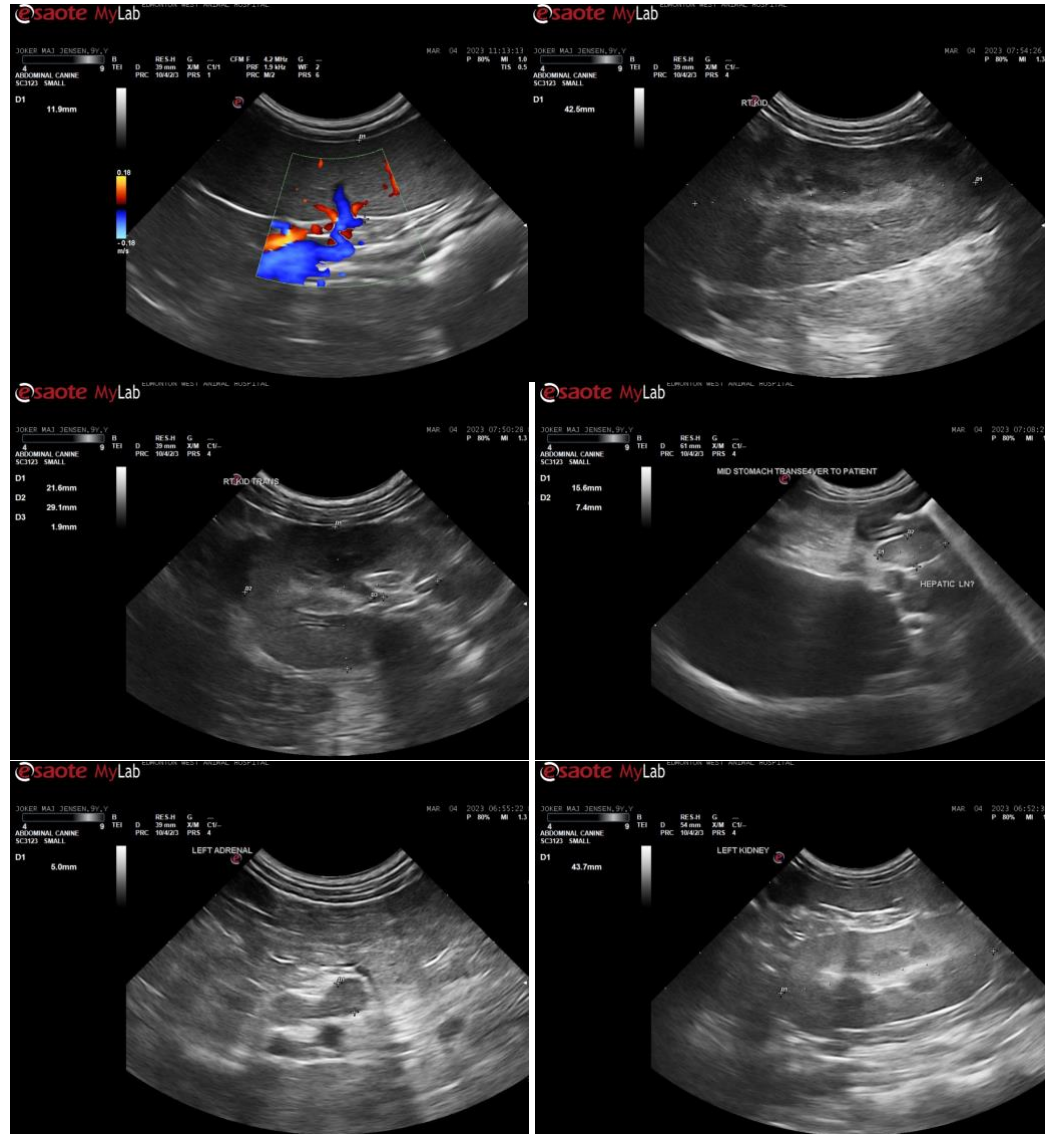
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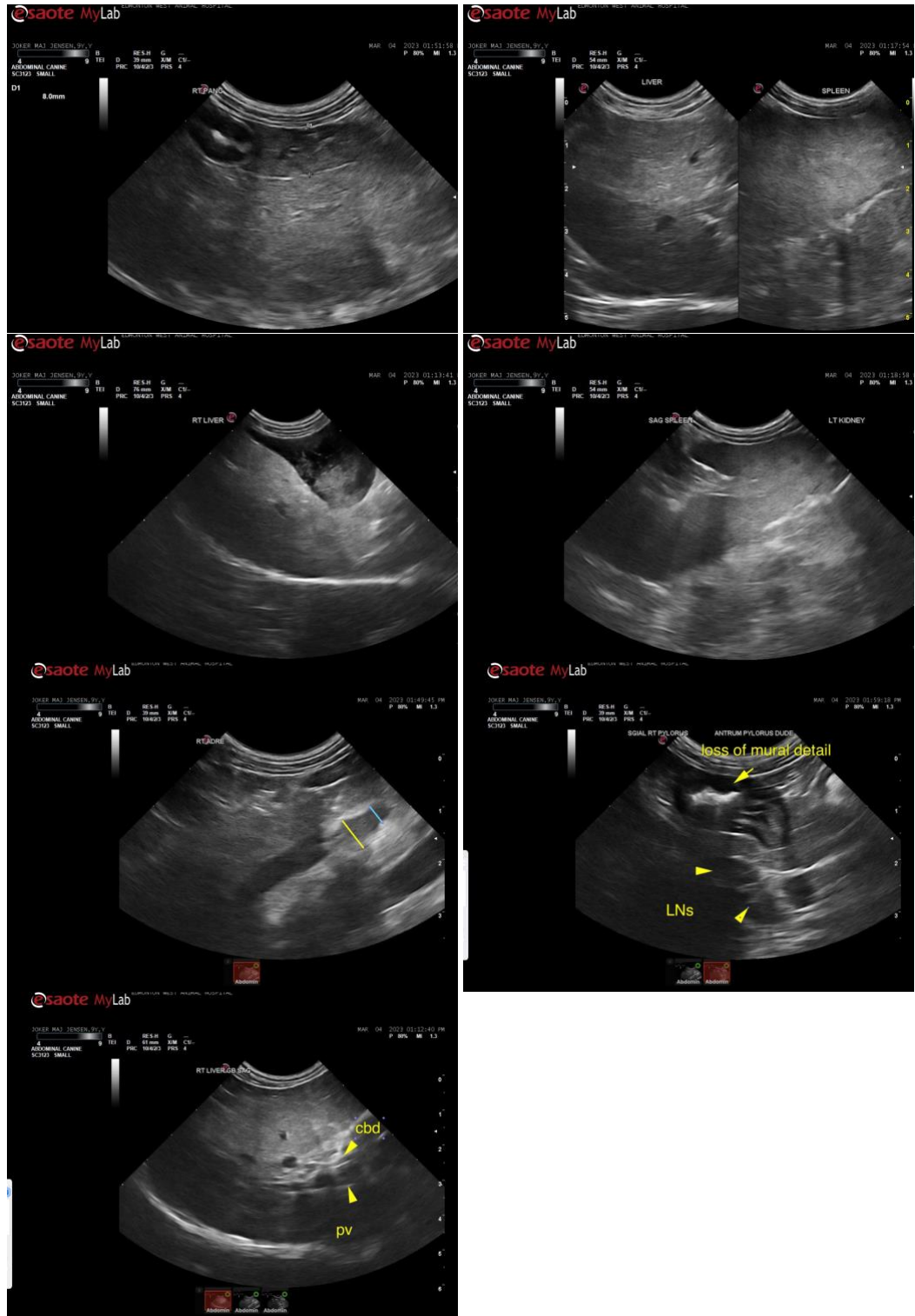
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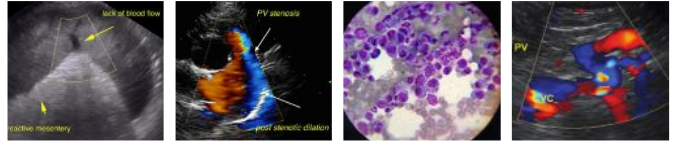
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.



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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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info@SonoPath.com

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