



PATIENT

Arthur Stout

SPECIES

Canine

BREED

Shih Tzu Mix

SEX

Neutered Male

AGE

13 Years

WEIGHT

8.5 kg

INTERPRETED BY

Greg Kuhlman, DVM,
DACVIM (SAIM)

IMAGING PERFORMED BY

Dr. Gira

HOSPITAL NAME

Silverado VH

REFERRING VET

Dr. KD

INVOICE

36325

DATE

3/20/26

PRESENTING CLINICAL SIGNS

Pre dental BW showed elevation of liver enzymes

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

There are two uroliths in the urinary bladder; the first urolith measures 7.2 mm in width, the second urolith measures 3.4 mm in width. Other than the uroliths, the urinary bladder appears normal.

Prostate is normal, measuring 6.3 mm in width, symmetrical, uniform echogenicity.

The right kidney presents normal in size (5.3 cm in length) with normal shape and architecture. Normal corticomedullary distinction. No ureteral dilation is noted. The right kidney has mild pinpoint foci in renal pelvis consistent with benign nephrocalcinosis. Several benign hypoechoic renal cortical cysts are present in the right kidney.

The left kidney presents normal size (4.53 cm) with normal shape and architecture. Normal corticomedullary distinction. No pyelectasia or ureteral dilation noted. Mild pinpoint hypoechoic shadowing foci are present in renal pelvis consistent with benign renal nephrocalcinosis. Benign cortical cysts are also noted in the left kidney.

Adrenal Glands

Right adrenal gland is diffusely enlarged. Caudal pole measures 7.4 mm width. Cranial pole measures 14.4 mm width. There is a hyperechoic nodule that measures 13.5 mm in diameter in the cranial pole of the right adrenal gland.

Left adrenal gland is mildly enlarged, measuring 9.2 mm at the cranial pole and 6.3 mm at the caudal pole.

Spleen

In the tail of the spleen, there's a 1.65 cm x 2.41 cm heteroechoic capsule displacing mass lesion. The remainder of the spleen, other than the mass, appears normal.

Liver

Liver was diffusely mildly enlarged with rounded margins and mildly hyperechoic echogenicity, with a diffuse mottled echo texture. There are multifocal, ill-defined hypoechoic lesions throughout the liver. Two lesions were found, one measured 9.9 cm x 4.3 cm, and the second smaller round lesion measured 2.8 mm in diameter.

The gallbladder presents normal size with anechoic contents. Normal gallbladder wall. No evidence of bile duct distention or obstruction.

Gastrointestinal

The stomach and intestines have normal wall layering and thickness. Colon contains normal contents with normal wall thickness.

Pancreas



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The visible pancreas is normal in size with normal echogenic parenchyma and surrounded by normal peri-pancreatic mesentery.

Free Abdomen

Mild jejunal lymphadenopathy or mild mesenteric lymphadenopathy is present; a representative node measures 4.4 cm x 8.4 cm. No free abdominal fluid is seen.

ULTRASONOGRAPHIC FINDINGS

- Splenic mass lesion, concerning for possible malignant neoplasia such as hemangiosarcoma, or less likely but possibly benign hemangioma.
- The left and right adrenal glands are mildly enlarged bilaterally with right adrenal nodule- This nodule most likely represents an incidental nodule. However, a malignant nodule cannot be ruled out, such as adrenal cortical carcinoma.
- Enlarged hyperechoic liver - most likely age-related changes. Given the liver is enlarged and diffusely hyperechoic, another differential would be possibly a vacuolar hepatopathy due to endocrine disease such as hyperadrenocorticism.
- Hypoechoic lesions throughout the liver, suspected to be benign regenerative nodules. Much less likely due to metastatic neoplasia or round cell neoplasia.
- Nephrocalcinosis and cortical cysts bilaterally
- Mild jejunal/mesenteric lymphadenopathy- These appear reactive, less likely neoplastic.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Recommend periodic recheck every 3-6 months of the right adrenal gland via ultrasound to determine if it's growing in size. If it is determined that this nodule is continuing to grow, then consider CT scan as presurgical planning for right-sided adrenalectomy.

There are two options in regard to the splenic mass; one would be to monitor it in 1-2 months via ultrasound to determine if it is growing significantly in size or changing in appearance and then considering splenectomy, or the second option would be to consider splenectomy at this time with submission of spleen for histopathology. If patient does go to surgery, for splenectomy, then recommend considering right-sided adrenalectomy at this time and submit adrenal for histopathology.

Given that the left and right adrenal gland are mildly enlarged, recommend submitting low-dose dexamethasone suppression test to rule out hyperadrenocorticism.

If the patient has surgery for splenectomy, consider cystotomy and submitting urinary bladder stones to the Minnesota Urolith Lab for analysis. If surgery is not performed, recommend starting a strict dissolution diet and rechecking urinary bladder stones for dissolution in 1-2 months via ultrasound.

Prognosis open pending results of recommended diagnostics.



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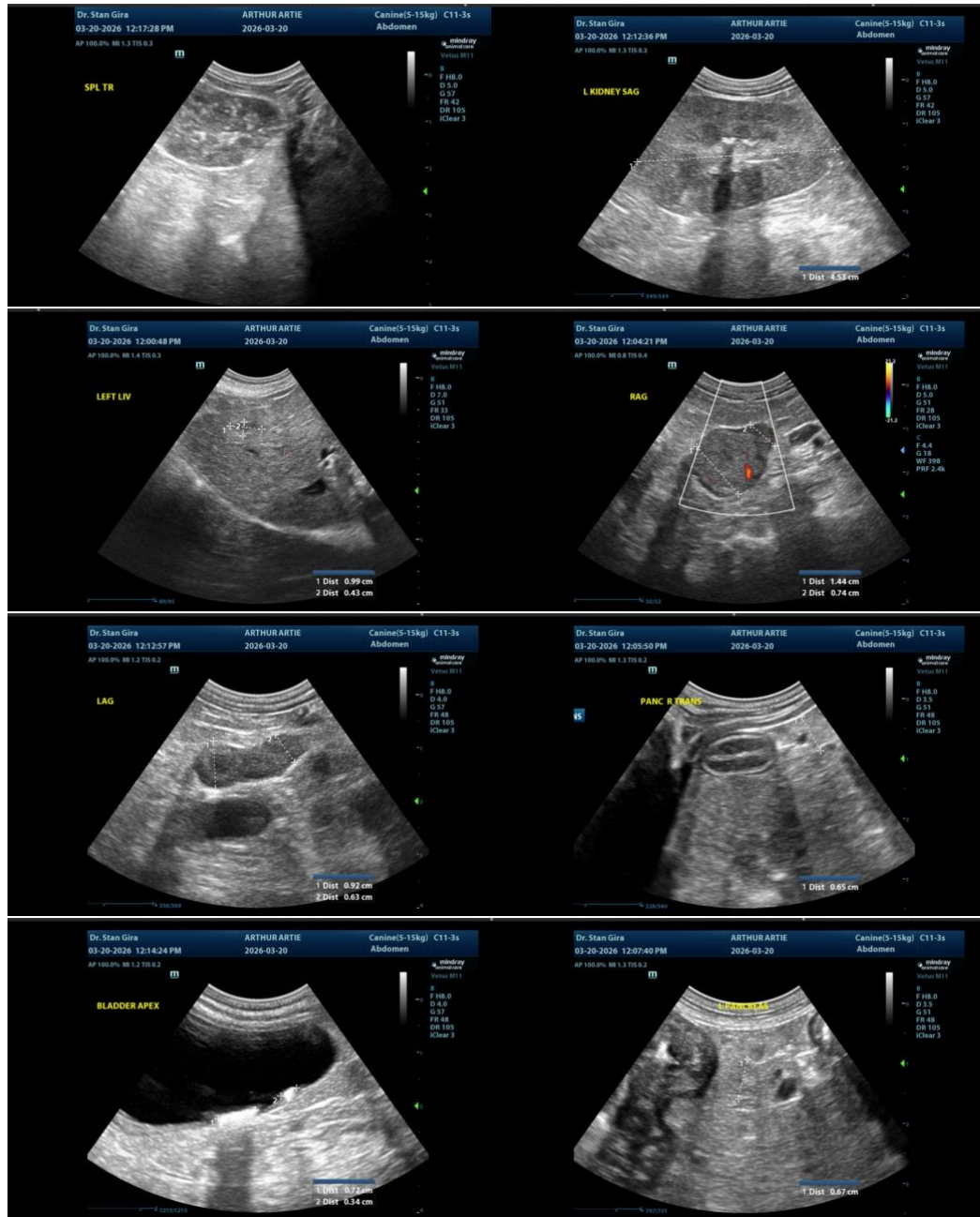
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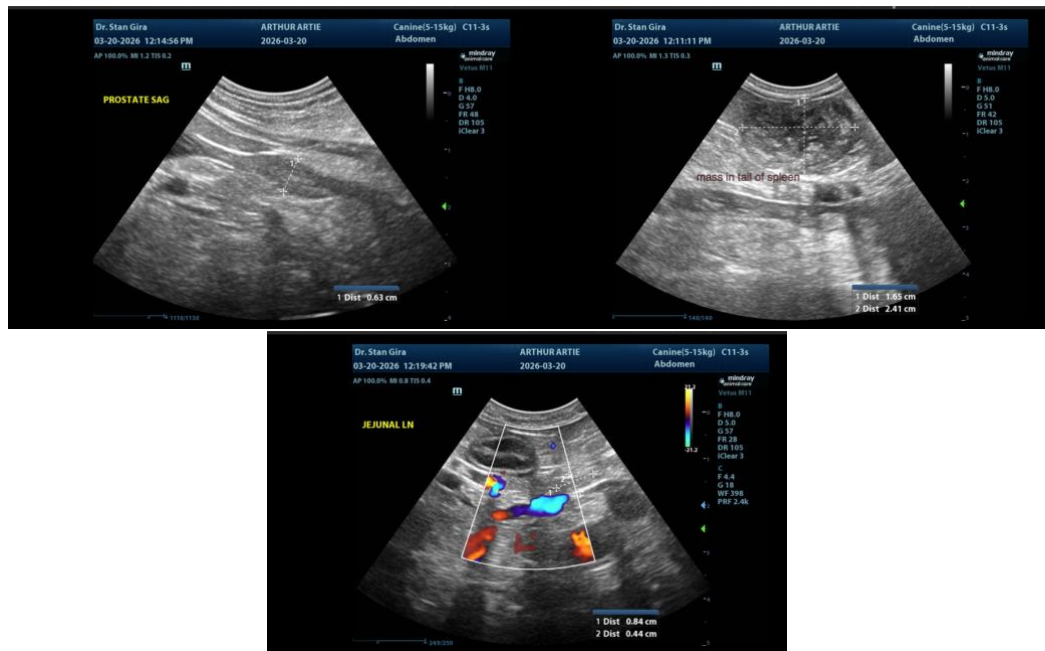
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Greg Kuhlman, DVM, DACVIM (SAIM)

Veterinary Internal Medicine Specialist
info@SonoPath.com