



PATIENT

Sadie Ruchin

SPECIES

Canine

BREED

German Shepherd

SEX

Spayed Female

AGE

14 Years

WEIGHT

68.2

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP (Canine
/ Feline Practice)

IMAGING PERFORMED BY

Dr. Graham Sager-
Gellerman DVM

HOSPITAL NAME

Back Bay Veterinary
Clinic

REFERRING VET

Dr. Katherine Wheeler
DVM

INVOICE

14041

DATE

03/03/26

PRESENTING CLINICAL SIGNS

- To evaluate the following condition: Compensated mitral valve disease (B1). Minor TR- no clinical pulmonary hypertension. Progressive cystatin B and UPC elevation
- New groaning/moaning behavior when lying down, 3 weeks. 6m MVD B1 recheck. Progressive cystatin B and UPC elevation (labs below). New groaning behavior
- Current Medications (Name, Dose, Frequency): Movoflex, Ursolyx, Galliprant

Abnormal PE/Chem/CBC/UA Results: Jan 24, 2026 CBC WN LChem: creat 0.8, BUN 21, cystatin B 293, ALP 272UA: 1.035, 2+ protein, UPC 0.7Fecal neg

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT	--	--	NM	1.43	42	74	0.4
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	LAD LA MAX 4 Chamber	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT	NM	1.9	1.0	68.2	3.9	3.7	--

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** dimension based on 2 different LA measurement methods. The cranial and caudal **mitral** valve leaflets presented mild thickening consistent with mild degenerative change. Doppler moderate eccentric MR. The **left ventricle** presented thicknesses with linear contour and was not dilated nor restricted. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology. Minor TR on doppler. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed trace pulmonic insufficiency on doppler. No visible **pericardial** or free pleura fluid was noted.



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No echographically detectable evidence of cardiac / pericardial tumors was visible. Possible intermittent arrhythmia.

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Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 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 change were noted.

BREED

German Shepherd

Normal renal size with asymmetrical margination was present in both kidneys. The renal cortex presented uniformly increased in echogenicity with uniform echotexture. The renal cortex appeared to be hypertrophied resulting in an altered cortex: medulla ratio. Mild to moderate indistinct corticomedullary border demarcation was also present. The left kidney measured 6.6 cm in length. The right kidney measured 6.3 cm in length.

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Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.79 cm width at the caudal pole.

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The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.78 cm width at the caudal pole.

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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.

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Liver & Gallbladder

The liver presented mild enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion.

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The gallbladder was non distended in size with mild nonorganized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.

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Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

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The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material.

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



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Pancreas

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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.

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Free Abdomen

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No overt lymphadenopathy or peritoneal effusion was present.

German Shepherd

ULTRASONOGRAPHIC FINDINGS

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- Persistent compensated mitral valve insufficiency (B1).
- Mild TR- no clinical pulmonary hypertension.
- Trace pulmonic insufficiency- not hemodynamically significant.
- Possible intermittent arrhythmia.
- Static noncongested hepatomegaly- benign.
- Static mild nonorganized gallbladder debris (non-mucocele).
- Nonspecific chronic renal changes.
- Normal gastrointestinal tract/spleen.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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The continued lack of LA enlargement indicates the current and future risk of complication, secondary to MR, remains low. No indication for cardiac medication at this stage. Prognosis remains variable and sonographic monitoring is advised. Recheck echo is suggested in 6 months, sooner if clinically indicated. Cardiac anesthetic risk is considered mild to moderate given age. If required, the following protocol is suggested. Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.

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Similar abdomen presentation compared to the previous study without evidence of progressive pathology. The liver is most suggestive of a benign or idiopathic vacuolar hepatopathy or non-obstructive cholestasis. No evidence of adrenal pathology as a contributing factor. CKD therapy with monitoring of proteinuria and as needed UPC is recommended.

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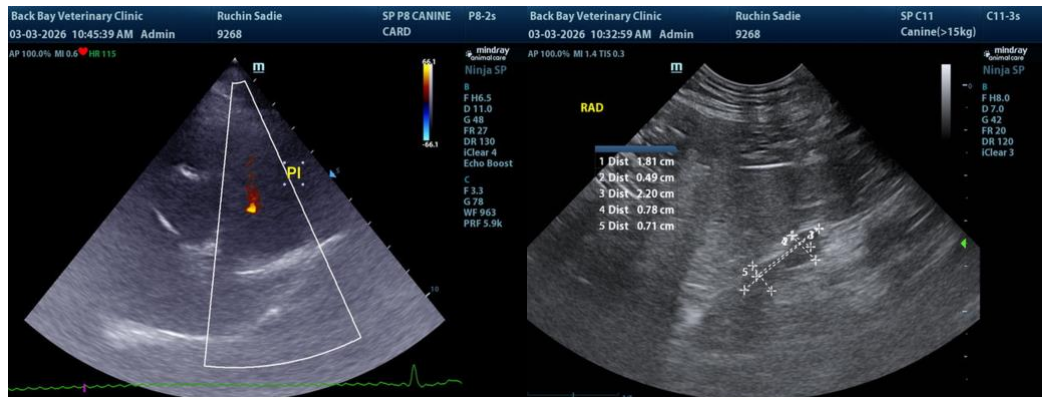
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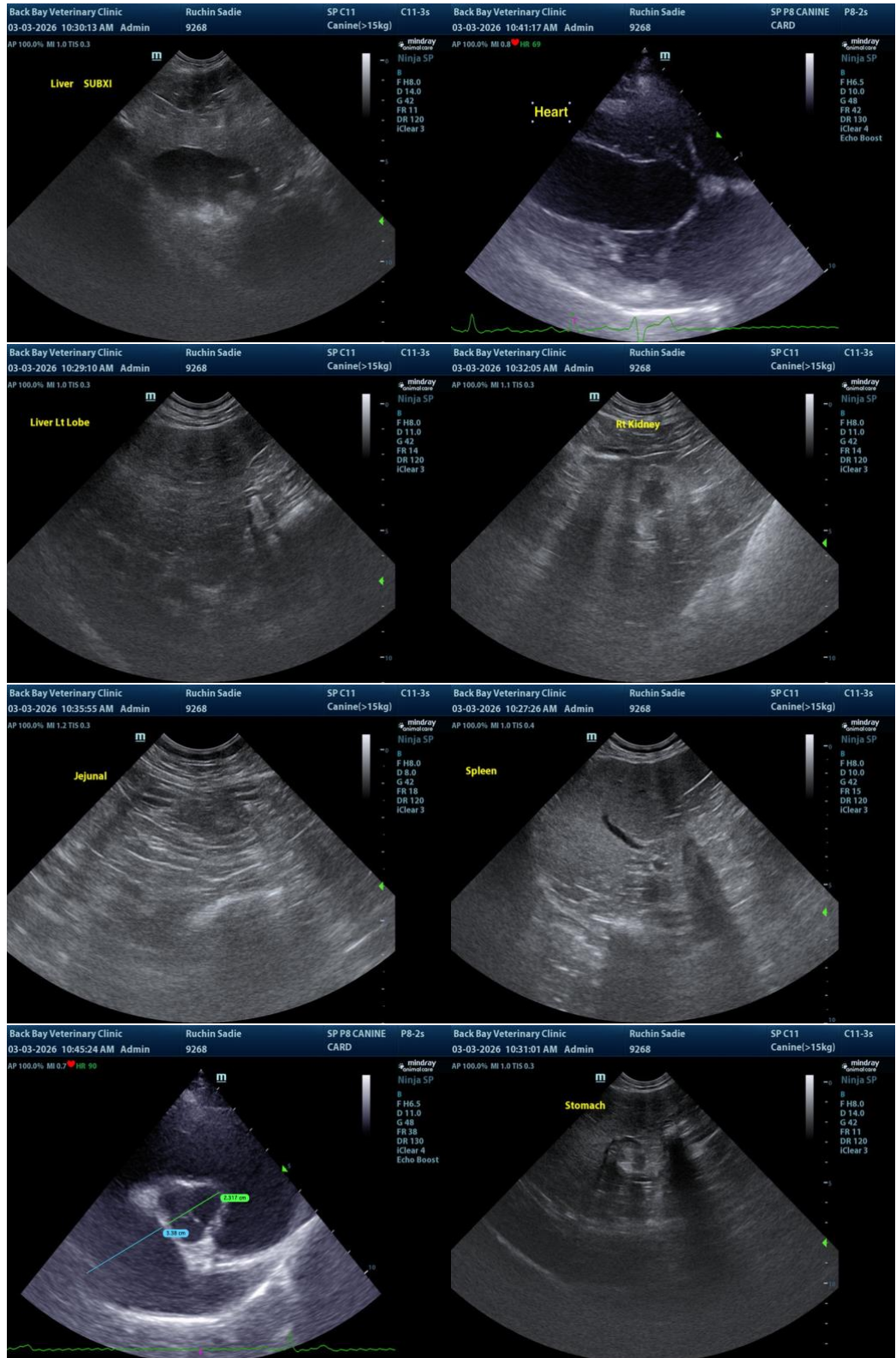
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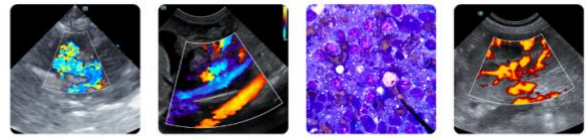
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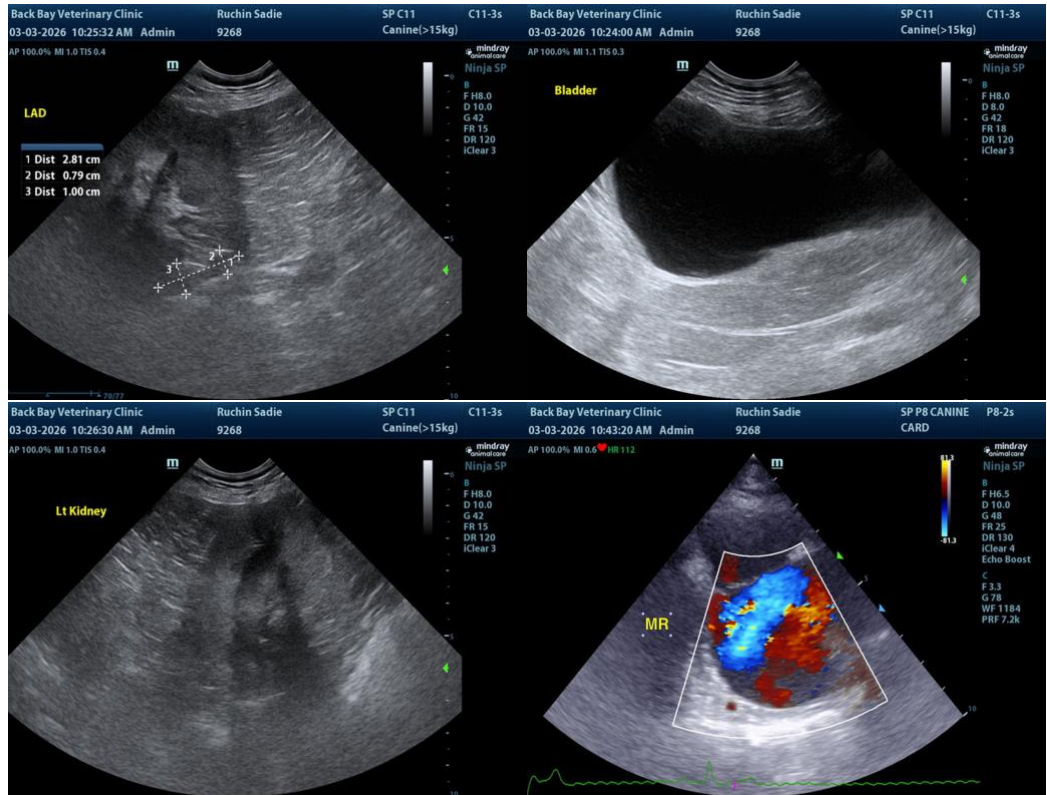
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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