



PATIENT

Maison Sarno

SPECIES

Feline

BREED

DSH

SEX

Male Neutered

AGE

10m

WEIGHT

8 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Vincent Ravancho

HOSPITAL NAME

Marsh Hospital for
 Animals

REFERRING VET

Dr. Andrew Armani

INVOICE

13350

DATE

4/1/26

PRESENTING CLINICAL SIGNS

History: lethargic, hasn't eaten in 3 days. No vomiting. DOES EAT HAIR TIES.

Current medications - Maropitant

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
NORMAL PARAMETER	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
PATIENT	--	NM	0.4	1.4	0.4	50	83
FELINE CARDIAC PARAMETERS	LA/AO (M-mode)	LA/AO HEART BASE (Sisson)	LAD LA MAX 4 Chamber		LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)
NORMAL PARAMETER	<1.5	1.6	0.7-1.7		<1.6	<1.3	40-60
PATIENT	--	1.3	1.4		1.0	1.0	--
Adapted from June Boon, Veterinary Echocardiography, 1998							
Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705							

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 2 separate LA measurements. The cranial and caudal **mitral** valve leaflets presented normal linear structure and kinetics. The **left ventricle** presented normal 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 and angles 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 and kinetics. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted or extra cardiac pathology in the visible planes. The cranial **mediastinum** and **pericardial regions** were free of masses in the visible window.

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



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sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

The area of the aortic trifurcation was free of pathology.

Normal size and margination was 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 3.6 cm in length. The right kidney measured 3.4 cm in length.

Adrenal Glands

The left and right adrenal glands were overtly normal in size, position and shape. The left adrenal gland measured 0.40 cm. The right adrenal gland measured 0.38 cm.

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. The spleen measured 0.94 cm width level of the mid spleen.

Liver

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.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild to moderate, variably echogenic, non-shadowing ingesta. Within the shadowing ingesta, mildly shadowing content was present measuring ~1.1 cm in diameter with concurrent shadowing hyperechoic echo measuring ~0.85 cm. No overt visualized obstructive pyloric mural pathology.

The intestinal walls demonstrated overall intact non-thickened wall layering and maintained 1:3 muscularis / mucosa ratio. Primarily generalized mild intestinal ileus to the level of the colon. Intestinal segments contained anechoic fluid with mild segmental subjective non-shadowing ingesta/chyme.

Normal visible colon wall layers were present with variably formed feces with soft and non-formed fecal matter present in proximal colon. Semi-formed, mildly shadowing fecal matter present in the descending colon.

Pancreas

The area of the pancreas was sonographically unremarkable.



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Free Abdomen

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No overt lymphadenopathy or peritoneal effusion was present.

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ULTRASONOGRAPHIC FINDINGS

- Normal cardiac structure/function
- Retained shadowing to mildly shadowing gastric ingesta and focal hyperechoic lumen echo
- Sonographically unremarkable small intestine with primarily generalized mild intestinal ileus
- Variably formed fecal matter in colon
- Normal area of pancreas

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given clinical history in this patient with current gastric ingesta exhibiting mild ingesta shadowing and hyperechoic echo, retained gastric ingesta and intermixed gastric foreign material is highly suspected. Definitive area of mechanical intestinal obstruction was not obvious indicating potential for generalized metabolic intestinal ileus. Nonobvious, non-obstructive to passing intestinal material cannot be definitively excluded.

Exploratory laparotomy with gross inspection of the gastrointestinal tract and biopsy strongly recommended despite exploratory findings is warranted. Hospitalization with gastrointestinal support including IV fluids, documented 12-hour fast and sonographic reassessment of the gastrointestinal tract would be more conservative yet not unreasonable. Correlation with full lab work is recommended.

No cardiac anesthetic contraindications.

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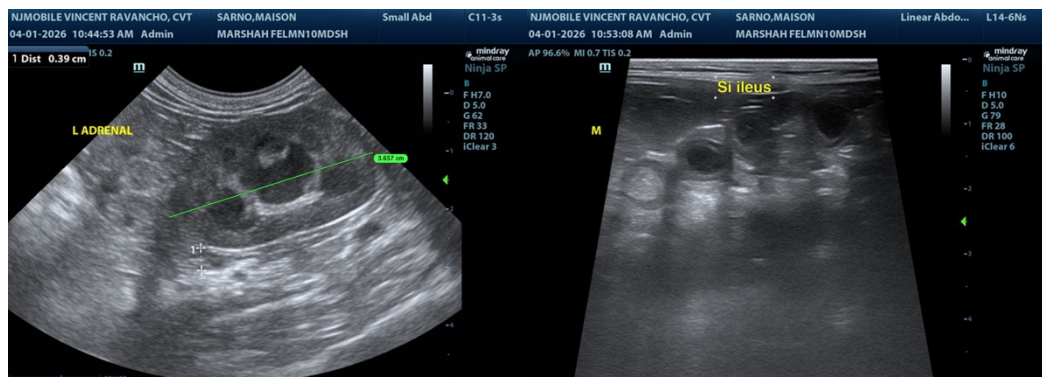
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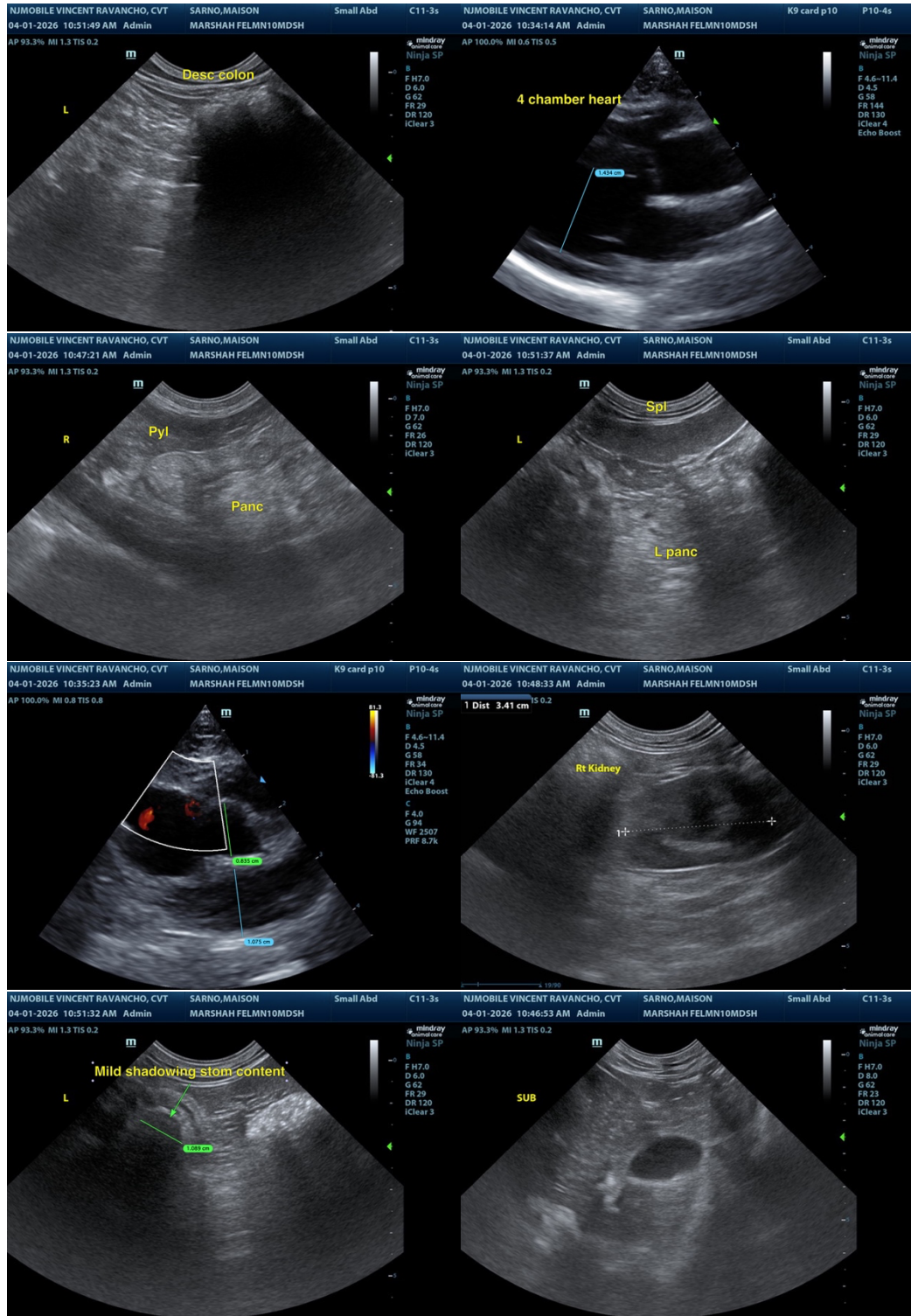
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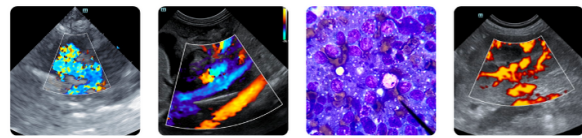
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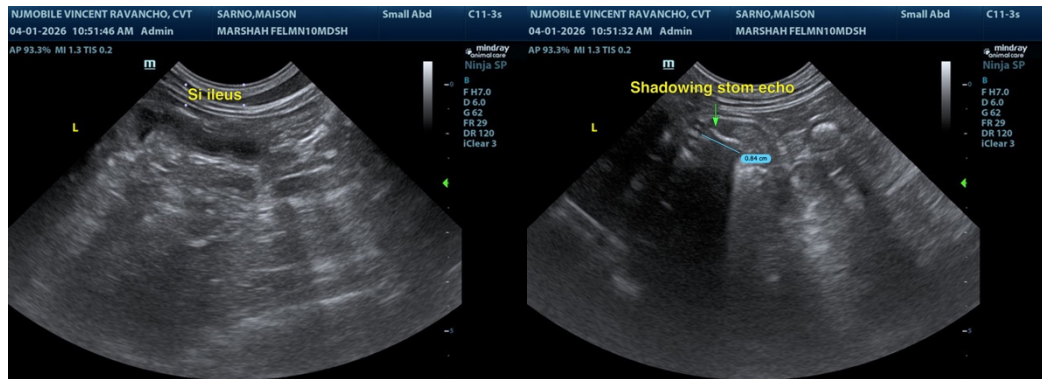
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)

info@sonopath.com