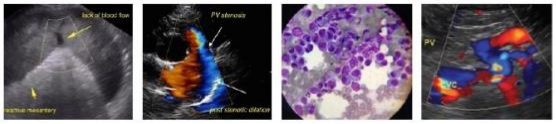
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Amber DeJesus

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

11 Years

WEIGHT

13 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

CVH of Wayne

REFERRING VET

Dr. Spitz

INVOICE

12897

DATE

9/1/21

PRESENTING CLINICAL SIGNS

History: Vomiting- hx of GI surgery for foreign bodies - cranial abdominal GI thickening +/- mass effect. Hx of HCM recheck heart. Current meds: Furosemide / Pimobendan

Abnormal PE/Chem/CBC/UA Results: Normal blood and urine 6/19/21

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	--	191	0.45	1.52	0.44	48.7	83.7
FELINE CARDIAC PARAMETERS	**LA/AO** (Boon)	**LA/AO HEART BASE** (Sisson)	**LA** 2D 4-chamber long axis AS to FW (Sisson) (cm)		**LVOT VEL.** (m/s)	**RVOT VEL.** (m/s)	**IVRT** (m/)
NORMAL PARAMETER	<1.5	0.88-1.79	0.7-1.7		<1.6	<1.3	40-60
PATIENT	1.5	1.3	1.4		1.0	0.73	NM

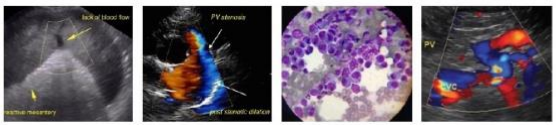
Adapted from June Boon,Veterinary Echocardiography,1998
Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705

Cardiac Presentation

The echocardiogram in this patient demonstrated normal left atrial size based on 3 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 – 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 were noted.



PATIENT

Amber DeJesus

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

11 Years

WEIGHT

13 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

CVH of Wayne

REFERRING VET

Dr. Spitz

INVOICE

12897

DATE

9/1/21

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 3.7 cm in length. The right kidney measured 4.2 cm in length.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.47 cm.

No overt pathology in the area of the right adrenal gland.

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.

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 retained mild to moderate echogenic to focally shadowing, ingesta primarily in the area of the mid gastric body extending into the antrum and pylorus. Distal acoustic shadowing exhibited by the ingesta in the area of the pylorus yet no overt evidence of mechanical pyloric outflow obstruction. The gastric body wall measured 0.26 cm.

The intestine exhibited generalized intact wall layering and primarily maintained 1:3 muscularis/mucosa ratio. Segments of the cranial abdominal jejunum exhibited propensity for mildly prominent muscularis layer yet no evidence of loss of intestinal wall detail. The jejunum wall measured 0.24 cm. No overt evidence of significant intestinal mural pathology or intestinal masses. Additionally, no evidence of small intestinal mechanical obstruction or foreign material.

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

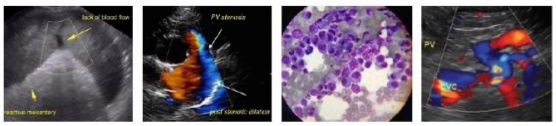
Pancreas

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.

Free Abdomen

Subtle reactive peri-intestinal mesentery noted in the cranial abdomen. No evidence of concurrent effusion, lymphadenopathy or omental masses.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Amber DeJesus

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

11 Years

WEIGHT

13 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

CVH of Wayne

REFERRING VET

Dr. Spitz

INVOICE

12897

DATE

9/1/21

ULTRASONOGRAPHIC FINDINGS

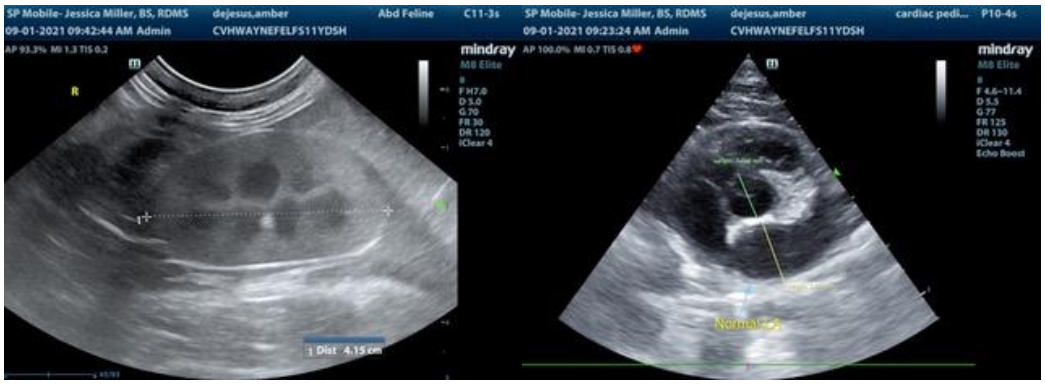
- Overtly normal cardiac structure and function
- Retained echogenic to focally shadowing gastric ingesta
- Segmental enteropathy-subjectively mild
- Subtle cranial abdominal reactive mesentery

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

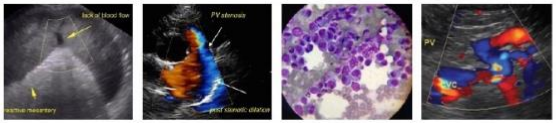
The echocardiogram revealed essentially normal heart structure and function without evidence of overt septal or left ventricular free wall hypertrophic changes without evidence of left or right heart volume overload. The lack of left atrium enlargement indicates that the risk of future complication is low without additional clinical issues such as systolic dysfunction identified. Given these findings, no overt indication for cardiac medications. It is recommended to wean off of current medications with assessment of clinical response and recheck echocardiogram in 3-6 months or sooner if clinical signs consistent with heart disease develop.

The presence of gastric ingesta in light of the vomiting is non-specific. Potential for post prandial presentation possible, however, some degree of gastric hypomotility with a possibility of non-obstructive hair or fabric or similar material cannot be excluded.

Hospitalization with IV fluid and gastrointestinal support with either sonographic or radiographic monitoring for evidence of gastric emptying would be appropriate. If persistent vomiting or evidence of persistent retained gastric ingesta, endoscopic or surgical gastrointestinal biopsies may be indicated.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



THE FOCAL ZONE
IMAGING PERFORMED BY
289-808-2608 info@thefocalzone.com

PATIENT

Amber DeJesus

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

11 Years

WEIGHT

13 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

CVH of Wayne

REFERRING VET

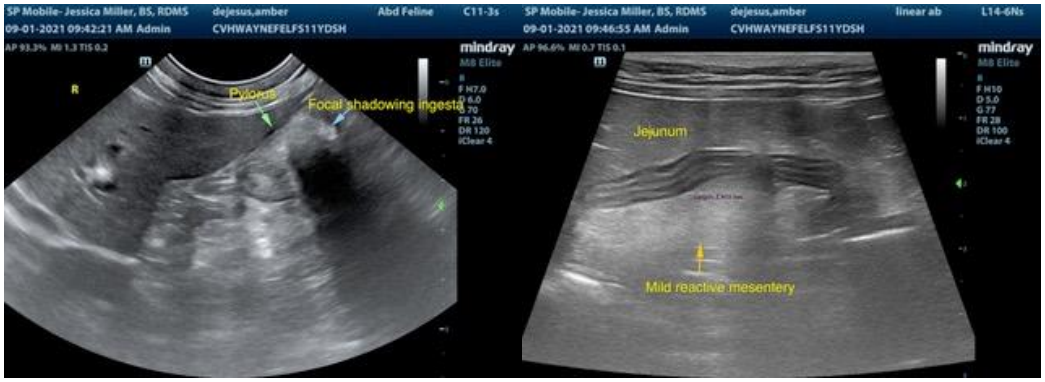
Dr. Spitz

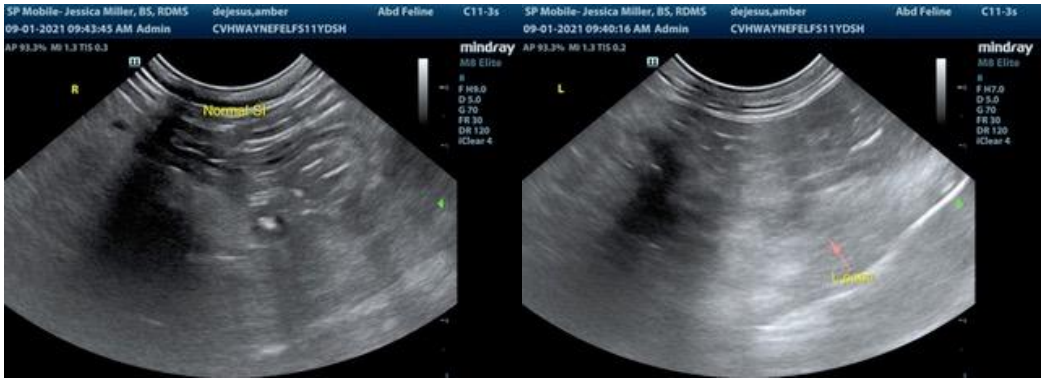
INVOICE

12897

DATE

9/1/21





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.

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