


**PATIENT PRESENTING CLINICAL SIGNS**

Josie Zega hx of ocv dz hx of acute collapse intermittent vomiting

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN**

Canine

**BREED**

Poodle

**SEX**

Spayed Female

**AGE**

12 Years

**WEIGHT**

11 Pounds

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			NM	1.2	45	80	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D short axis Base view (cm)	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	BELOW	BELOW	BELOW	BELOW
PATIENT		1.0	0.83		2.15	2.2	

**Cardiac Presentation**

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. 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. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonary outflow** 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. The cranial **mediastinum** and **pericardial** and **extra-cardiac** regions were free of masses in the visible window.

**INTERPRETED BY**

Eric Lindquist, DMV

DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Jenn

**HOSPITAL NAME**

Rockaway AH

**REFERRING VET**

Dr. Maniar

**INVOICE**

38130

**DATE**

6/1/22

**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 pelvic urethra was imaged 2.0 cm beyond the cystourethral junction.

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 his age patient. Medullary structure differed distinctly from that of the cortex



**PATIENT** and no evidence of pelvic dilation was present. The right kidney measured 3.62 cm. The left kidney measured 3.13 cm.

Josie Zega

**Adrenal Glands**

**SPECIES** 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 1.47 cm x 0.45 cm at the caudal pole and 0.49 cm at the cranial pole.

Canine

**BREED** **Spleen**

Poodle

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.

**SEX**

Spayed Female

**Liver**

**AGE**

12 Years

The **liver** was slightly subnormal in size, yet structurally unremarkable. Normal vascularity. No evidence of shunting. The gallbladder was unremarkable.

**Gastrointestinal**

**WEIGHT**

11 Pounds

Gastric fluid noted in the **stomach**, yet structurally the GI tract was unremarkable. No evidence of obstructive or mural disease.

**Pancreas**

**INTERPRETED BY**

Eric Lindquist, DMV

DABVP, Cert. IVUSS

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

**ULTRASONOGRAPHIC FINDINGS**

**IMAGING PERFORMED BY**

Jenn

- Normal echocardiogram
- Age related abdominal changes

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**HOSPITAL NAME**

Rockaway AH

No evidence of cardiac disease to be responsible for the clinical signs. No evidence of abdominal pathology. Paroxysmal arrhythmia is a potential in this patient, even though structurally the heart appears normal. Vagal issues may be playing a role, given the vomiting followed by collapse in the history. If it continues, holter monitor would be indicated. GI protectant protocol recommended.

**REFERRING VET**

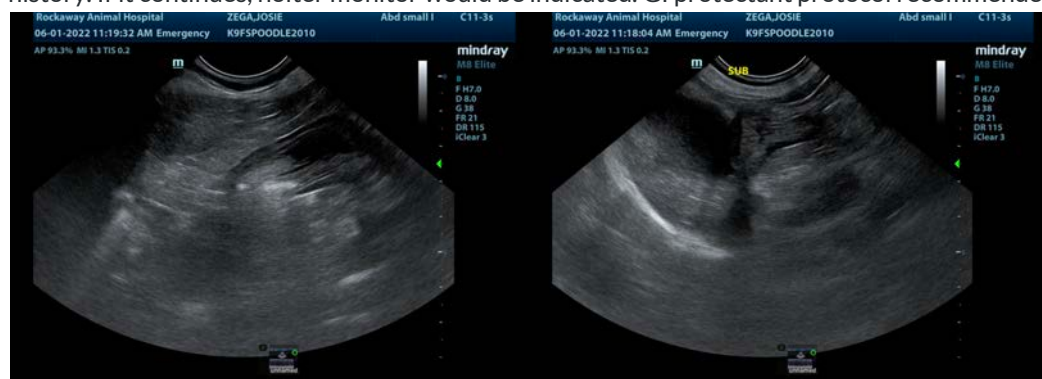
Dr. Maniar

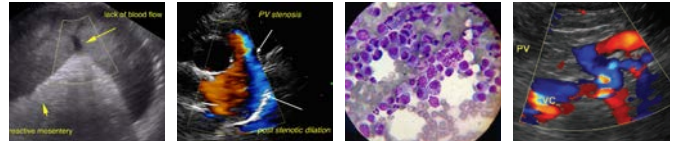
**INVOICE**

38130

**DATE**

6/1/22





**PATIENT**

Josie Zega

**SPECIES**

Canine

**BREED**

Poodle

**SEX**

Spayed Female

**AGE**

12 Years

**WEIGHT**

11 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Jenn

**HOSPITAL NAME**

Rockway AH

**REFERRING VET**

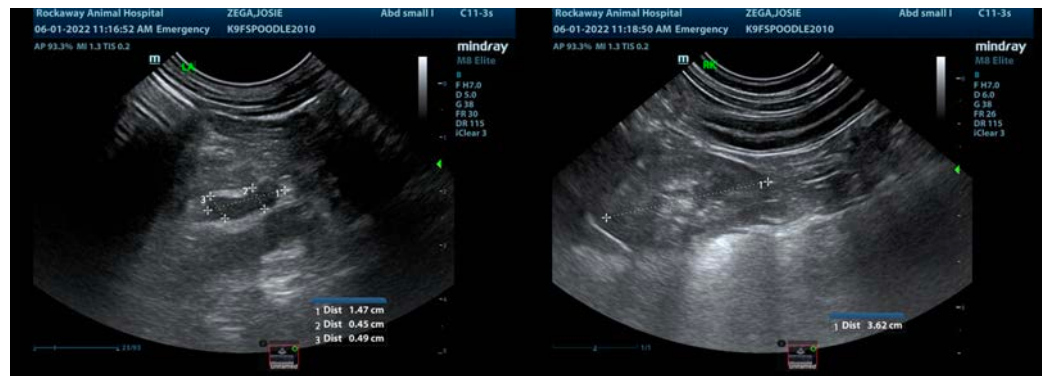
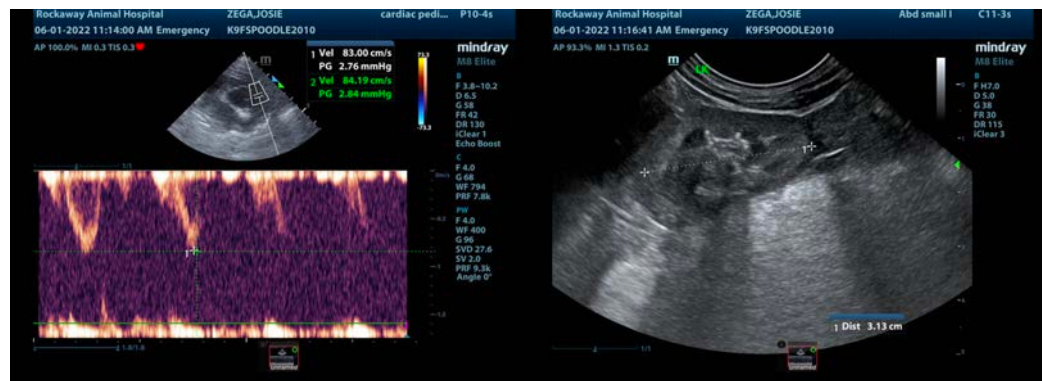
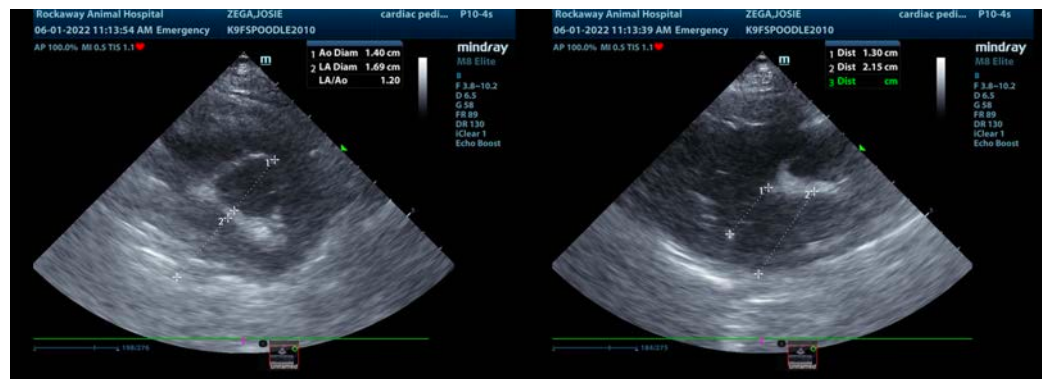
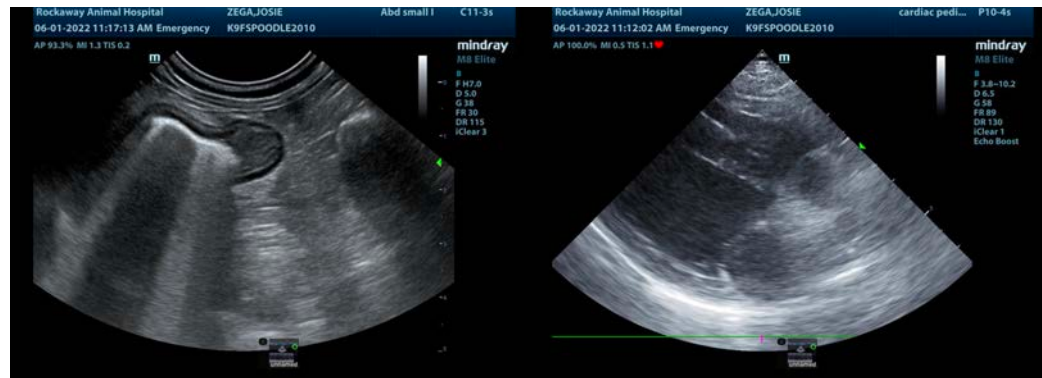
Dr. Maniar

**INVOICE**

38130

**DATE**

6/1/22





**PATIENT**

Josie Zega

**SPECIES**

Canine

**BREED**

Poodle

**SEX**

Spayed Female

**AGE**

12 Years

**WEIGHT**

11 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV

DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Jenn

**HOSPITAL NAME**

Rockaway AH

**REFERRING VET**

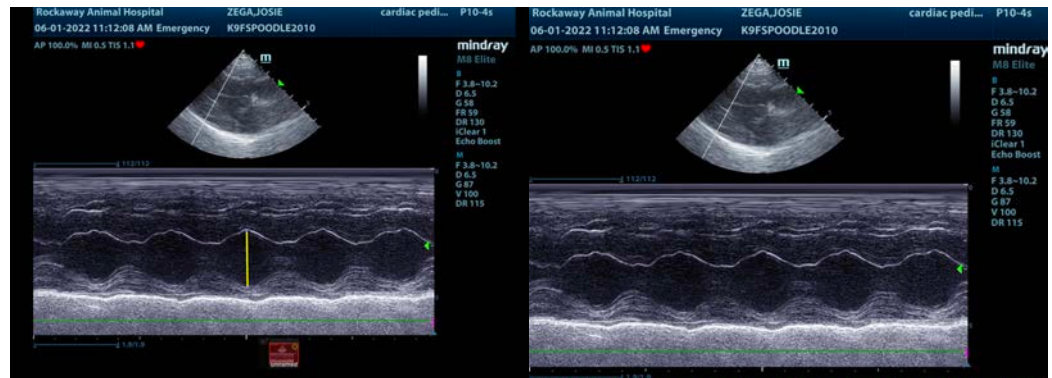
Dr. Maniar

**INVOICE**

38130

**DATE**

6/1/22



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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com

[info@SonoPath.com](mailto:info@SonoPath.com)