



## PATIENT

Edward Simon

## SPECIES

Feline

## BREED

DSH

## SEX

Neutered Male

## AGE

2.5 Years

## WEIGHT

11 Pounds

## INTERPRETED BY

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

## IMAGING PERFORMED BY

Kelly Vazquez

## HOSPITAL NAME

Northvale VC

## REFERRING VET

Dr. Stefanie Simon

## INVOICE

15757

## DATE

5/27/22

## PRESENTING CLINICAL SIGNS

History: Newly adopted patient presents for echo and abdominal ultrasound. Plantigrade stance on left hind leg - soft stool, but otherwise doing great. Current meds: Panacur and Flagyl for intestinal parasites.

Abnormal PE/Chem/CBC/UA Results: CBC/Chem/T4: all WNL. U/A: pH 7.5, USG 1.053, 1+ struvite, 3+ proteinuria, UPC .4.

## 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	--	107	0.34	1.44	0.34	31	64
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	1.1	1.1	--	1.00	.68	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** revealed a (0.5 cm) nonshadowing concretion, consistent with coalesced debris. This is not an overt calculus given the lack of acoustic shadowing.



**PATIENT**

Edward Simon

The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The right kidney measured 4.53 cm. The left kidney measured 4.71 cm.

**SPECIES**

Feline

**Adrenal Glands**

**BREED**

DSH

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 right adrenal gland measured 0.35 cm. The left adrenal gland measured 0.52 cm.

**SEX**

Neutered Male

**Spleen**

**AGE**

2.5 Years

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. The spleen measured the upper limits of normal at 0.97 cm.

**Liver**

**WEIGHT**

11 Pounds

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**Gastrointestinal**

**IMAGING PERFORMED BY**

Kelly Vazquez

The gastrointestinal tract presented considerable gastric artifact due to the presence of ingesta. This did not permit thorough evaluation of portions of the gastric and upper intestinal structure. No overt abnormality was seen in the visualized tissue, however. This is consistent with a post-prandial presentation within a few hours of mealtime. If the prandial temporal interval does not fit the case history, and the patient presents a history of post-prandial vomiting, this could indicate a delayed upper gastrointestinal outflow due to primary or secondary pyloric hypertrophy, upper GI infiltrative disease, motor deficits, or a non-visualized foreign body. A prudent approach would be to rescan this patient at 24-hour NPO status to further review the non-visible regions if stomach primarily as well as assess any delayed outflow issue.

**HOSPITAL NAME**

Northvale VC

**REFERRING VET**

Dr. Stefanie Simon

**Pancreas**

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.

**INVOICE**

15757

**ULTRASONOGRAPHIC FINDINGS**

**DATE**

5/27/22

- Normal echocardiogram- no evidence of cardiac disease
- Small urinary bladder concretion, non-obstructive



**PATIENT**

Edward Simon

- Normal GI tract with full stomach
- Unremarkable abdomen otherwise

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**SPECIES**

Medical management for dissolution of the bladder concretion recommended. Recheck sonogram in 6-8 weeks.

Feline

**BREED**

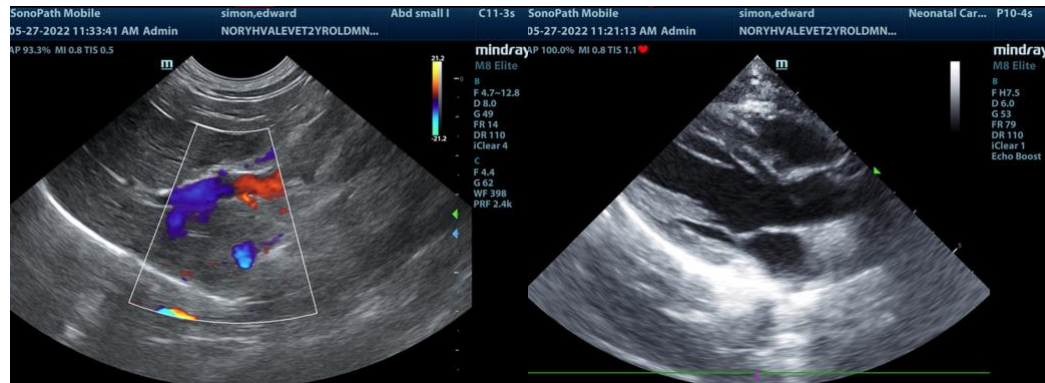
DSH

**SEX**

Neutered Male

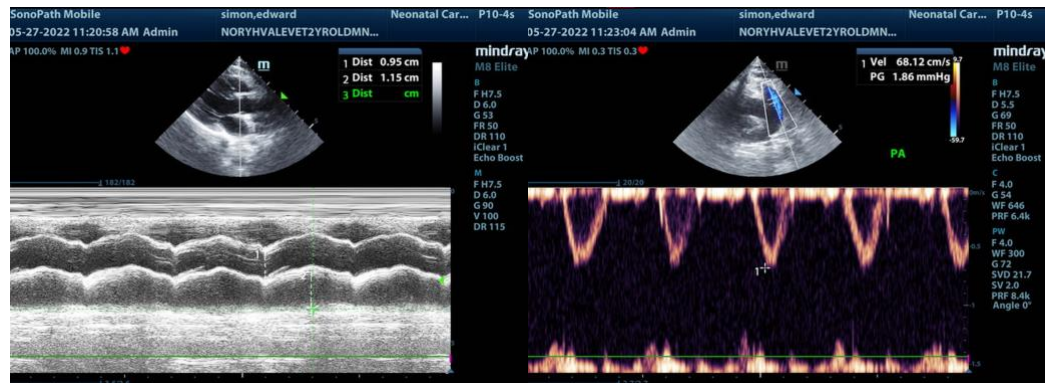
**AGE**

2.5 Years



**WEIGHT**

11 Pounds



**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

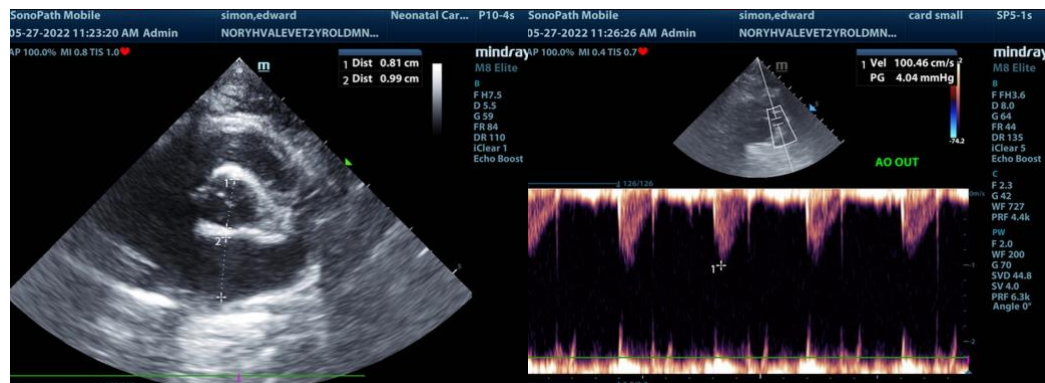
Kelly Vazquez

**HOSPITAL NAME**

Northvale VC

**REFERRING VET**

Dr. Stefanie Simon



**INVOICE**

15757

**DATE**

5/27/22



**PATIENT**

Edward Simon

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

2.5 Years

**WEIGHT**

11 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

Northvale VC

**REFERRING VET**

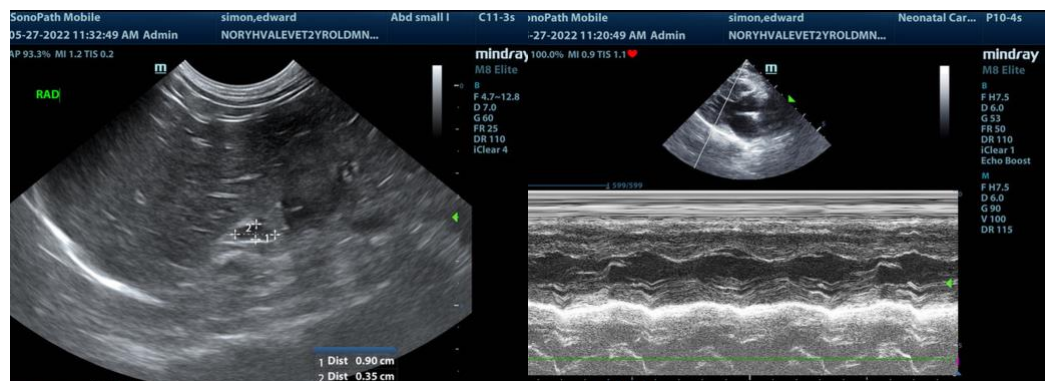
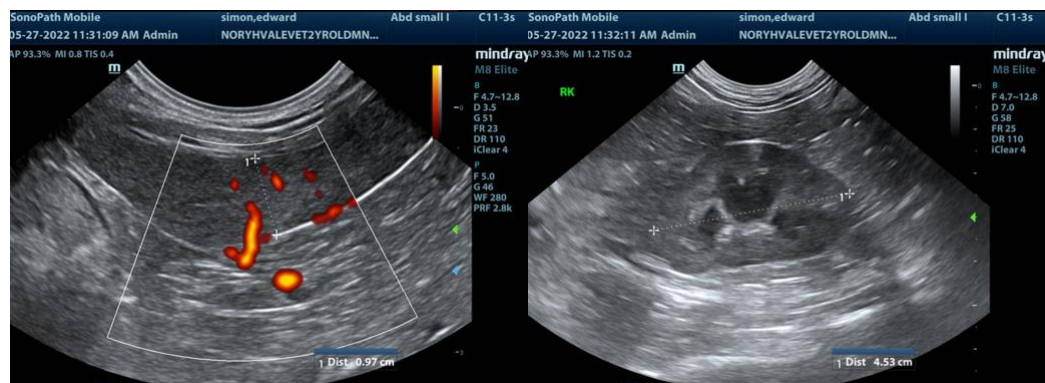
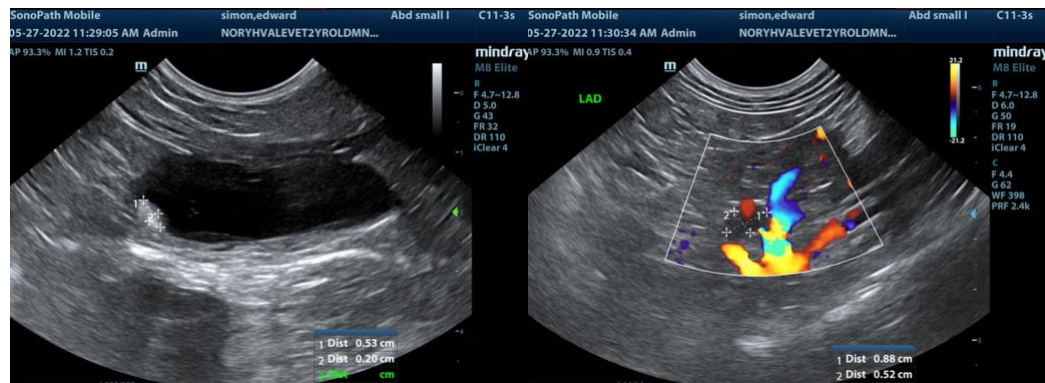
Dr. Stefanie Simon

**INVOICE**

15757

**DATE**

5/27/22



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



**PATIENT**

**visible in the image/video clips provided.**

Edward Simon

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.

**SPECIES**

Feline

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

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

2.5 Years

**WEIGHT**

11 Pounds

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING  
PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

Northvale VC

**REFERRING VET**

Dr. Stefanie Simon

**INVOICE**

15757

**DATE**

5/27/22