



PATIENT

Buster Nowak

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

11 Months

WEIGHT

8.5 Pounds

INTERPRETED BY

Eric Lindquist, DMV,
DABVP (Canine &
Feline), Cert. IVUSS

IMAGING PERFORMED BY

Vincent Ravancho,
CVT

HOSPITAL NAME

Marsh AH

REFERRING VET

Dr. Armani

INVOICE

36351

DATE

3/23/26

PRESENTING CLINICAL SIGNS

- Presented for Kidney failure
- PU/PD and poor appetite
- No known toxin exposures
- Abnormal PE/Chem/CBC/UA Results: BUN 173, Creat 4.7, Phos 13.1, HCT 25, RBC 5.0 USG - 1.013

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

FELINE CARDIAC PARAMETERS	BODY WEIGHT (lbs)	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	8.5	181	0.27	1.48	0.28	49	84
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	1.0	1.0	--		1.14	1.03	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							

EPSS: 0.1, E-wave velocity: 0.7

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.



PATIENT

Buster Nowak

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

11 Months

WEIGHT

8.5 Pounds

INTERPRETED BY

Eric Lindquist, DMV,
 DABVP (Canine &
 Feline), Cert. IVUSS

IMAGING PERFORMED BY

Vincent Ravancho,
 CVT

HOSPITAL NAME

Marsh AH

REFERRING VET

Dr. Armani

INVOICE

36351

DATE

3/23/26

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 **right kidney** revealed slight irregular contour and slight pyelectasia. Patchy slight heterogenous irregular changes were noted in the right kidney primarily. The right kidney measured 5.0 cm. The **left kidney** was structural unremarkable. The left kidney measured 4.4 cm. Blood flow to the kidneys appeared to be adequate on color flow assessment.

Adrenal Glands

The regions of the **adrenal glands** revealed no evident pathology.

Spleen

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.

Liver

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.

Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

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.

ULTRASONOGRAPHIC FINDINGS

- Normal echocardiogram
- Minor irregular right kidney with slight pyelectasia- very nonspecific presentation, acute insult suspected. Toxin exposure and infectious agents are possible.
- Fairly normal left kidney



PATIENT

Buster Nowak

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

11 Months

WEIGHT

8.5 Pounds

INTERPRETED BY

Eric Lindquist, DMV,
 DABVP (Canine & Feline), Cert. IVUSS

IMAGING PERFORMED BY

Vincent Ravancho,
 CVT

HOSPITAL NAME

Marsh AH

REFERRING VET

Dr. Armani

INVOICE

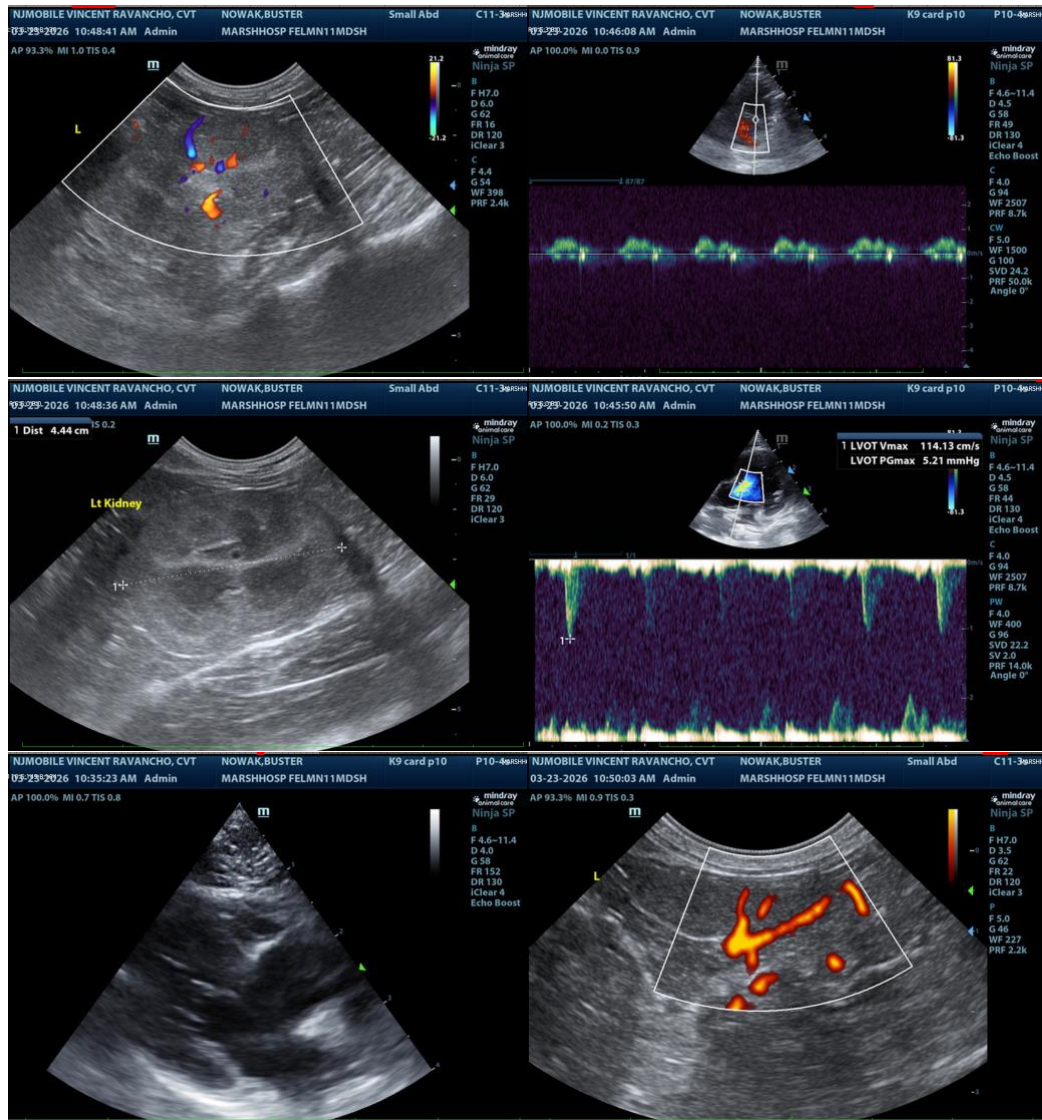
36351

DATE

3/23/26

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Empirical measures for renal failure are indicated. 72 hour IV fluid protocol, blood pressures, urine culture, infectious disease screening are all indicated. Prognosis is dependent upon response to therapy. Renal biopsy may be necessary for further definition or screening FNA of the renal cortices to further define inflammation.





PATIENT

Buster Nowak

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

11 Months

WEIGHT

8.5 Pounds

INTERPRETED BY

Eric Lindquist, DMV,
 DABVP (Canine &
 Feline), Cert. IVUSS

IMAGING PERFORMED BY

Vincent Ravancho,
 CVT

HOSPITAL NAME

Marsh AH

REFERRING VET

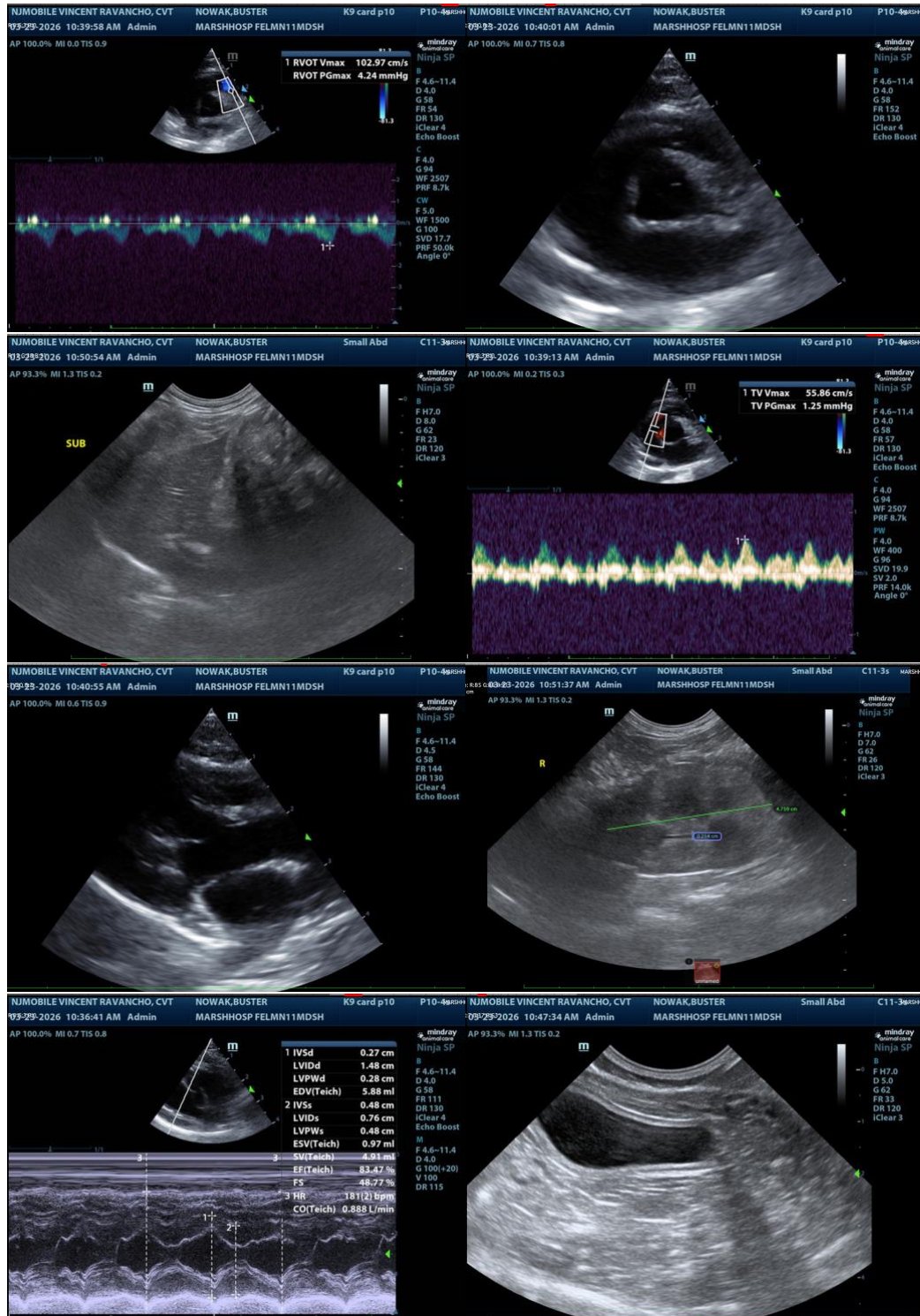
Dr. Armani

INVOICE

36351

DATE

3/23/26





PATIENT

Buster Nowak

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

11 Months

WEIGHT

8.5 Pounds

INTERPRETED BY

Eric Lindquist, DMV,
DABVP (Canine &
Feline), Cert. IVUSS

**IMAGING
PERFORMED BY**

Vincent Ravancho,
CVT

HOSPITAL NAME

Marsh AH

REFERRING VET

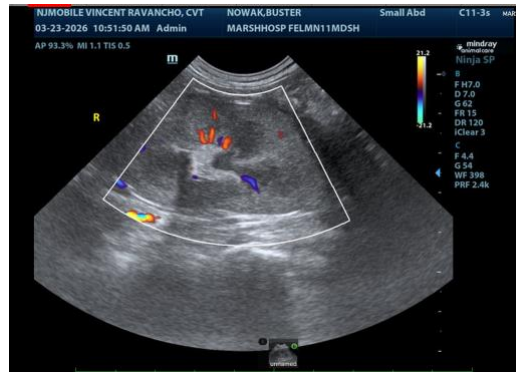
Dr. Armani

INVOICE

36351

DATE

3/23/26



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(CFM), Cert. IVUSS,
CEO, Owner, Founder -- SonoPath.com
info@SonoPath.com