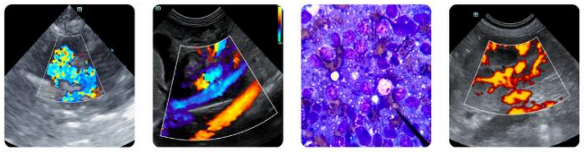


Clinical Sonography & Telecytology
Educational Teleconsultation Services™

**PATIENT**
Noelle Schultz

**SPECIES**
Canine

**BREED**
Beagle

**SEX**
FS

**AGE**
8yr

**WEIGHT**
34.5lb

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

**IMAGING PERFORMED BY**
Meghan Morse

**HOSPITAL NAME**
Newton Veterinary Hospital

**REFERRING VET**
Dr Timony

**INVOICE**
23476

**DATE**
01/07/2026

## PRESENTING CLINICAL SIGNS

Lethargic, decreased appetite, grade 5/6 HM- unsure if worsened, O unsure of prior grade. Current meds: Cerenia

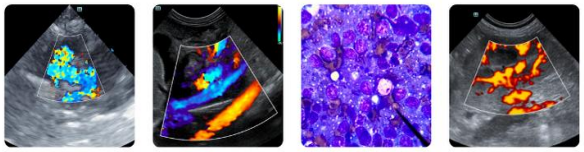
Abnormal PE/Chem/CBC/UA Results: BUN 184.2, Creat 7.1, Phos 22.7, T bili 2.3, Alb 4.6, ALP 362, cpL abnormal

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN AND HEART

| CANINE CARDIAC PARAMETERS | MR VMAX (m/s) | TR VMAX (m/s) | LA/AO M-mode | LA/AO (Heart Base; Swe) | FS (%) | EF (%) | EPSS (cm) |
|---|---|---|---|---|---|---|---|
| NORMAL PARAMETER | 4.5-5.5 | <2.7 | 1.3 | Up to 1.6 | 28-40 | 40-100 | <0.6 |
| PATIENT | -- | -- | -- | 1.0 | 50 | 82 | 0.2 |
| **CANINE CARDIAC PARAMETERS** | **HR** (BPM) | **AV VMAX** (m/s) | **PV MAX** (m/s) | **BODY WEIGHT** (kg) | **LAD** LA MAX 4 Chamber | **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 | | | | |
| PATIENT | NM | 2.0-2.2 | 1.5 | -- | 4.4 | 3.6 | -- |

### *Cardiac Presentation*

The echocardiogram in this patient demonstrated normal left atrial size based on 2 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. No overt MR on Doppler. 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 mild dynamic outflow pattern with overall normal structure and integrity, including normal aortic valve and without evidence of sub valvular pathology. Borderline to mild increased measured LV outflow velocity and aortic valve insufficiency on Doppler. 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. No overt TR on Doppler. 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). Normal measured





**PATIENT**

Noelle Schultz

**SPECIES**

Canine

**BREED**

Beagle

**SEX**

FS

**AGE**

8yr

**WEIGHT**

34.5lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Meghan Morse

**HOSPITAL NAME**

Newton Veterinary Hospital

**REFERRING VET**

Dr Timony

**INVOICE**
23476

**DATE**
01/07/2026

RVOT velocity. No visible pericardial or free pleural fluid was noted. The cranial mediastinum and pericardial and extra-cardiac 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 3 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no evidence of urine/lumen sediment, mineral, or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

Normal renal size with asymmetrical margination was present in both kidneys. The renal cortex presented uniformly increased in echogenicity with uniform echotexture. The renal cortex appeared to be hypertrophied resulting in an altered cortex: medulla ratio. Mild loss of corticomedullary distinction was also present. The renal medullary volume was subjectively reduced. Mild bilateral pyelectasia was present. The left kidney measured 5.4 cm in length. The right kidney measured 5.56 cm in length.

The area of the aortic trifurcation was free of pathology.

### *Adrenal Glands*

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.64 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.61 cm width at the caudal pole.

### *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.

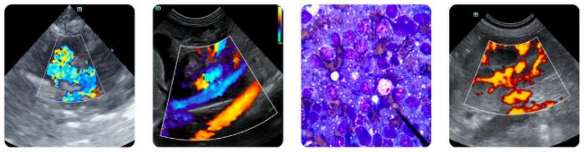
### *Liver/Gallbladder*

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. Normal vascular volume. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and mild non-organized debris. The cystic and common bile ducts were normal.

### *Gastrointestinal*

The stomach presented intact wall layering with a normal wall layer ratio. The stomach contained a mild amount of retained anechoic fluid. Within the pyloric outflow, a small amount of subjective non-obstructive hyperechoic content which may indicate partial fluid absorbing material such as fabric or stuffing was present. No evidence of obstructive pyloric mural pathology.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of mechanical/metabolic ileus, obstruction or foreign material.





**PATIENT**

Noelle Schultz

**SPECIES**

Canine

**BREED**

Beagle

**SEX**

FS

**AGE**

8yr

**WEIGHT**

34.5lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Meghan Morse

**HOSPITAL NAME**

Newton Veterinary Hospital

**REFERRING VET**

Dr Timony

**INVOICE**
23476

**DATE**
01/07/2026

Normal visible colon wall layers were present. Primarily soft fecal matter with strongly shadowing fecal matter in the distal descending colon/ colorectum was present.

### *Pancreas*

The pancreas was normal in size and contour with mild heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

### *Free Abdomen*

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

## ULTRASONOGRAPHIC FINDINGS

### Primary

- Normal cardiac structure /function.
- Borderline to mild increased measured LV outflow velocity with aortic valve insufficiency
- Bilateral chronic nephropathy exhibiting mild pyelectasia
- Normal adrenal glands
- Benign hepatopathy pattern with non-organized gallbladder debris (non-mucocele)
- Possible passed foreign material in distal colon
- Heterogeneous pancreas
- Mild hypomotile stomach with possible non-obstructive partial fluid absorbing pyloric content, possible non-obstructive stuffing, fabric or similar

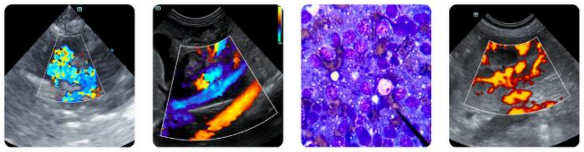
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The only source of the murmur is the borderline amount of increased measured outflow velocity with concurrent aortic valve insufficiency. No evidence of sub-aortic valve or aortic valve pathology i.e. stenosis as an obvious contributing factor which essentially classifies it as a flow murmur. Regardless of classification the current hemodynamic effects of the murmur appear to be low. No evidence of congestive heart failure. No indication for cardiac medications. Conservative monitoring of the murmur going forward is advised with recheck echo suggested in 6 months, sooner if clinically indicated.

A urinary workup including UA C/S and UPC level for renal staging is recommended. Assessment for cranial abdomen/ subxiphoid discomfort which may suggest mild to chronic pancreatitis is recommended.

Given no current evidence of gastrointestinal obstructive pattern yet with potential for a mild amount of non-obstructive pyloric foreign material or passed foreign material in the colon, hospitalization with gastrointestinal support, documented 12 hour fast, sonographic reassessment of the gastrointestinal tract and monitoring of fecal output is recommended.

New Jersey Mobile
FUELED BY SONOPATH VETERINARY ULTRASOUND



Clinical Sonography & Telecytology
Educational Teleconsultation Services™

SonoPath
FOSTERING THE ART OF VETERINARY MEDICINE™
www.SonoPath.com
info@sonopath.com 800.838.4268

**PATIENT**

Noelle Schultz

**SPECIES**

Canine

**BREED**

Beagle

**SEX**

FS

**AGE**

8yr

**WEIGHT**

34.5lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Meghan Morse

**HOSPITAL NAME**

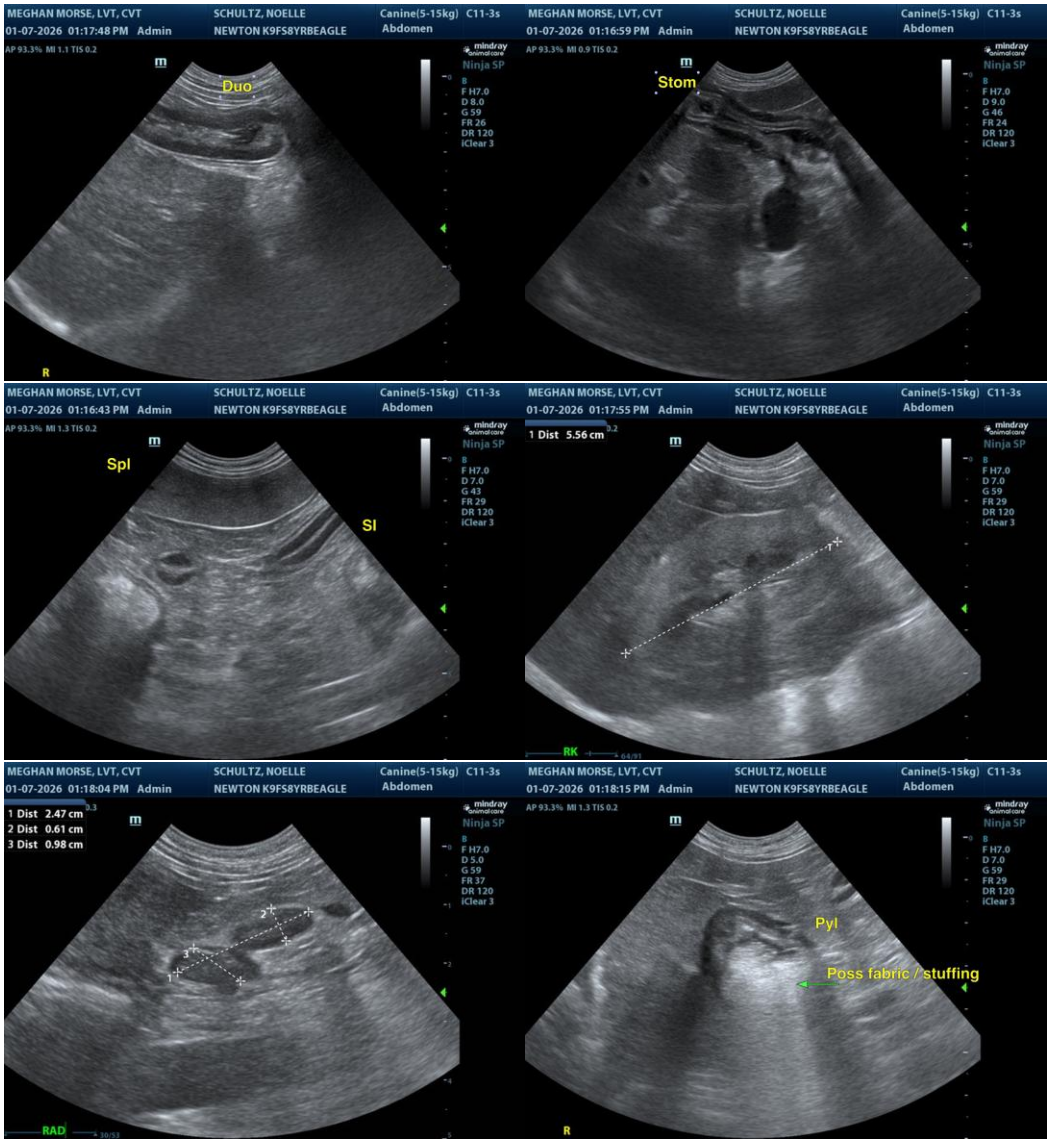
Newton Veterinary Hospital

**REFERRING VET**

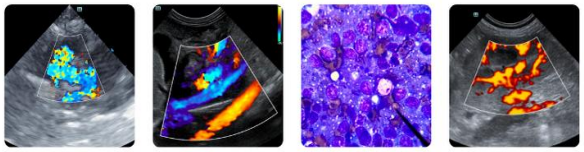
Dr Timony

**INVOICE**
23476

**DATE**
01/07/2026



New Jersey Mobile
FUELED BY SONOPATH VETERINARY ULTRASOUND



Clinical Sonography & Telecytology
Educational Teleconsultation Services™

SonoPath
FOSTERING THE ART OF VETERINARY MEDICINE™
www.SonoPath.com
info@sonopath.com
800.838.4268

**PATIENT**

Noelle Schultz

**SPECIES**

Canine

**BREED**

Beagle

**SEX**

FS

**AGE**

8yr

**WEIGHT**

34.5lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Meghan Morse

**HOSPITAL NAME**

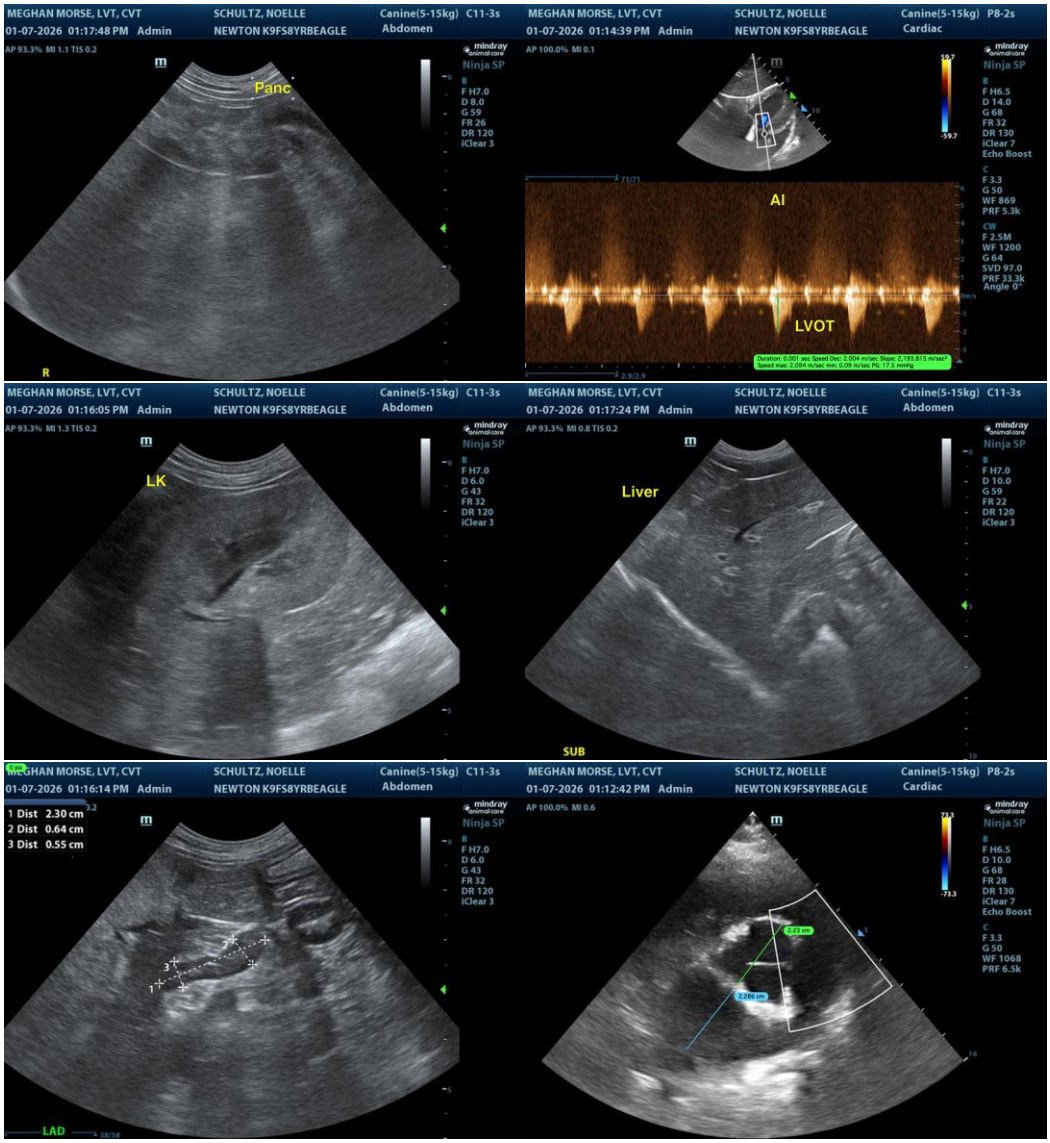
Newton Veterinary Hospital

**REFERRING VET**

Dr Timony

**INVOICE**
23476

**DATE**
01/07/2026



**PATIENT**

Noelle Schultz

**SPECIES**

Canine

**BREED**

Beagle

**SEX**

FS

**AGE**

8yr

**WEIGHT**

34.5lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Meghan Morse

**HOSPITAL NAME**

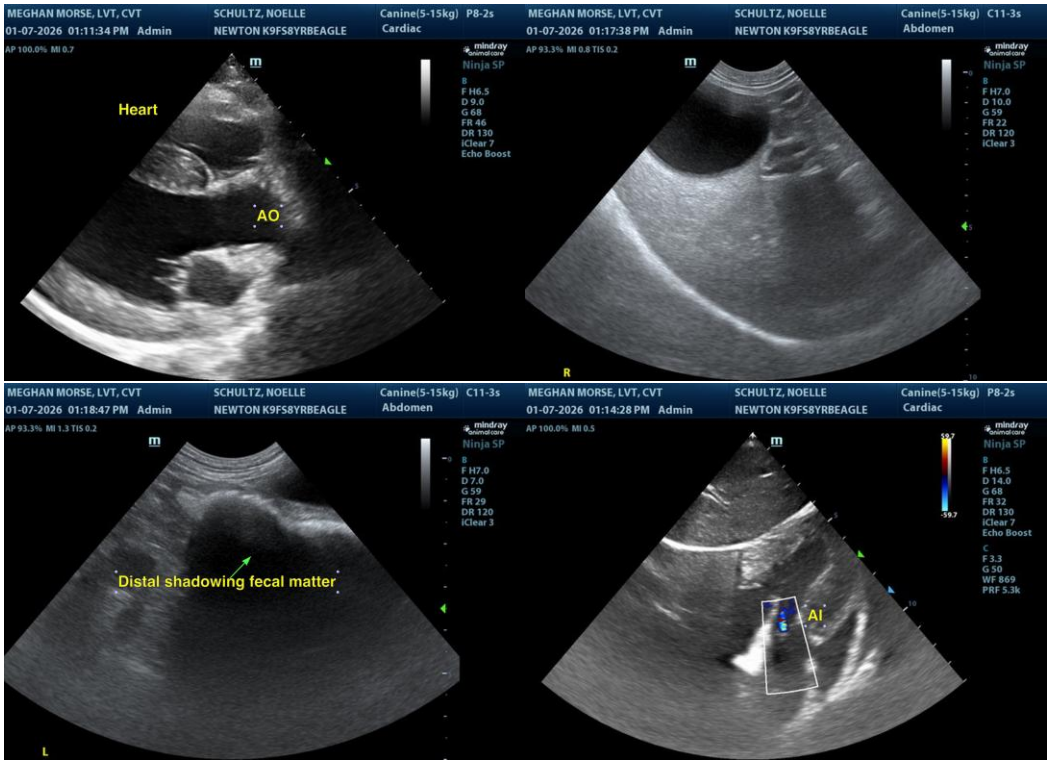
Newton Veterinary Hospital

**REFERRING VET**

Dr Timony

**INVOICE**
23476

**DATE**
01/07/2026




**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