


PATIENT PRESENTING CLINICAL SIGNS

Ozzy Fobest Wheezing, firm and fluid filled distended abdomen. Current meds: Lasix 12.5mg BID

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

Canine

BREED

Yorkie

SEX

Neutered Male

AGE

10 Years 5 Months

WEIGHT

9.2 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			1.2	1.45	42.5	93.1	0.15
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				
PATIENT	140	1.36	1.1		1.7	1.6	

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** free fluid noted. Mild to moderate free pleural fluid was present. No echographically detectable evidence of cardiac or pericardiac infiltrative disease or masses, as well as no overt evidence of masses in the cranial mediastinum.

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.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 3.7 cm. The right kidney measured 3.5 cm.

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Andover AH

REFERRING VET

Dr. Vanderbogart

INVOICE

26931

DATE

11/8/21



PATIENT

Adrenal Glands

Ozzy Fobest

The adrenal glands were uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.3 cm length x 0.65 cm at the caudal pole. The right adrenal gland measured 1.7 cm length x 0.57 cm at the caudal pole.

SPECIES

Spleen

Canine

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.

BREED

Yorkie

Liver

SEX

Neutered Male

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. A solitary, non-expansive, well demarcated, uniformly hypoechoic nodule noted in the mid caudal liver, measuring 1.4 cm diameter. 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.

AGE

10 Years 5 Months

Gastrointestinal

WEIGHT

9.2 Pounds

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

The small intestine presented intact wall layering with primarily maintained 1:3 muscularis/mucosa ratio with segmental propensity for mildly increased mucosa echogenicity to subtle mucosal fogging. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. Duodenum wall measured 0.41 cm. Jejunum wall measured 0.30 cm.

INTERPRETED BY

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

The colon walls presented intact yet prominent wall layering with mild thickened to echogenic submucosa. Segmental non-uniform feces noted in the lumen.

IMAGING PERFORMED BY

Jessica Miller

Pancreas

HOSPITAL NAME

Andover AH

The pancreas was mildly prominent in size with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

Free Abdomen

REFERRING VET

Dr. Vanderbogart

Small pockets of scant peritoneal free fluid noted around the caudal liver margins and adjacent to intestinal lumens. Generalized reactive mesentery noted. No overt lymphadenopathy.

ULTRASONOGRAPHIC FINDINGS

INVOICE

26931

- Normal echocardiogram
- Non-specific hepatic nodule – nodular/regenerative hyperplasia, focal hematopoiesis, lipogranuloma, while potential for neoplasia (although thought less likely) cannot be definitively excluded.
- Heterogeneous pancreas – parenchymal remodeling owing to previous inflammation or low-grade to chronic pancreatitis possible.
- Subjective segmental increased small bowel mucosa echogenicity to indistinct mucosal fogging.
- Pleural and mild peritoneal free fluid – non-cardiogenic.
- Mild chronic renal changes

DATE

11/8/21



PATIENT

Ozzy Fobest

SPECIES

Canine

BREED

Yorkie

SEX

Neutered Male

AGE

10 Years 5 Months

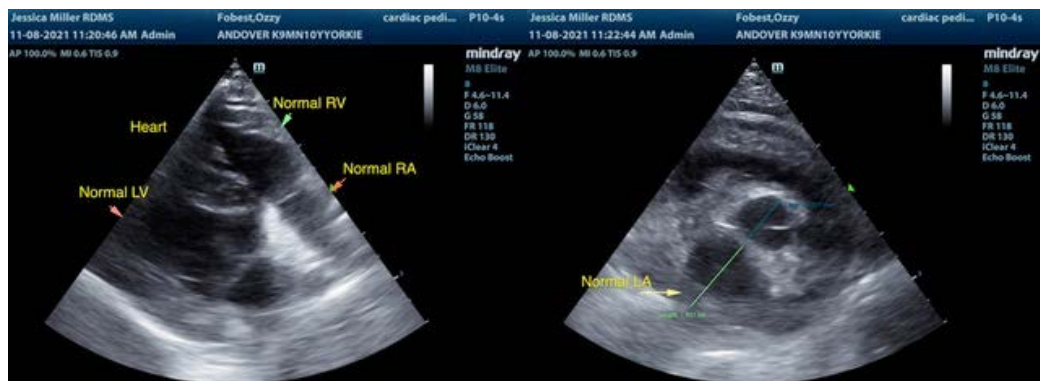
WEIGHT

9.2 Pounds

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overtly normal cardiac structure and function without evidence of left or right heart chamber enlargement, systolic dysfunction, or overt clinical pulmonary hypertension. The presentation of the heart was not consistent with cardiogenic biventricular effusion. Although not definitive, potential for protein losing enteropathy may be possible in this patient if subnormal albumin levels or panhypoproteinemia.

Correlation with full CBC/Chem panel and UA recommended. Correlation with pleura effusion analysis cytology +/- culture and sensitivity if evidence of inflammatory cells is warranted. Potential for concurrent low-grade or chronic pancreatitis possible, yet subjectively the degree of pancreatitis (if present) is not overtly consistent with that of which may potentially cause peritonitis or generalized systemic inflammation.



INTERPRETED BY

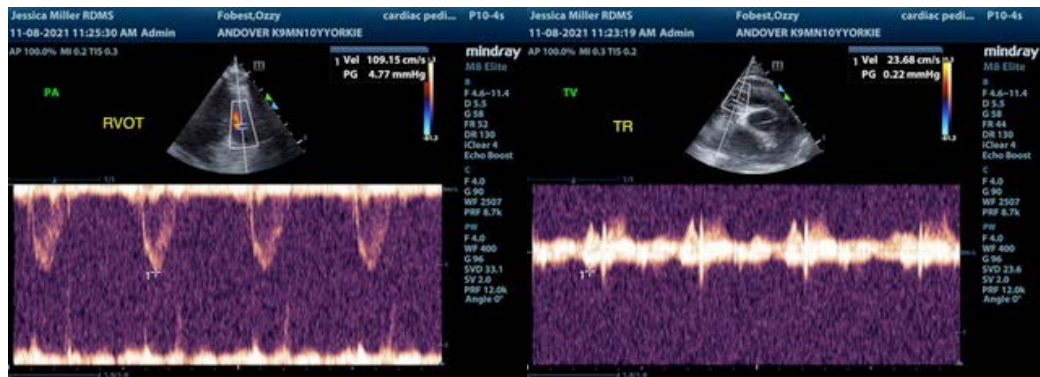
R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Andover AH



REFERRING VET

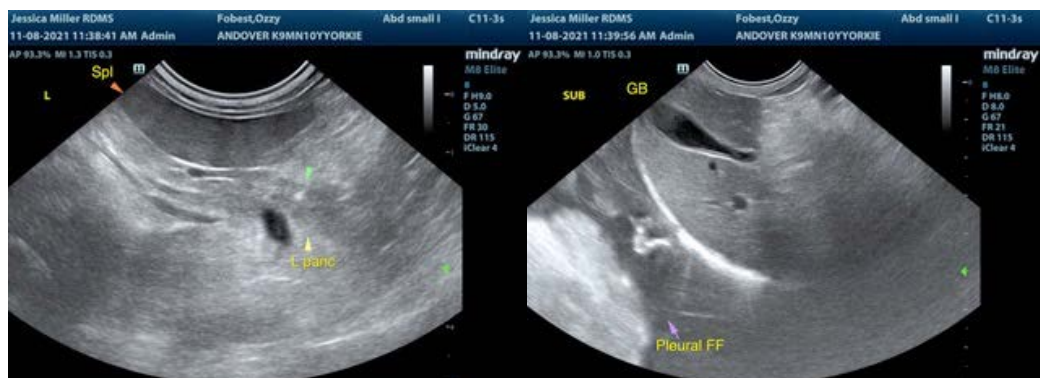
Dr. Vanderbogart

INVOICE

26931

DATE

11/8/21





PATIENT

Ozzy Fobest

SPECIES

Canine

BREED

Yorkie

SEX

Neutered Male

AGE

10 Years 5 Months

WEIGHT

9.2 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Andover AH

REFERRING VET

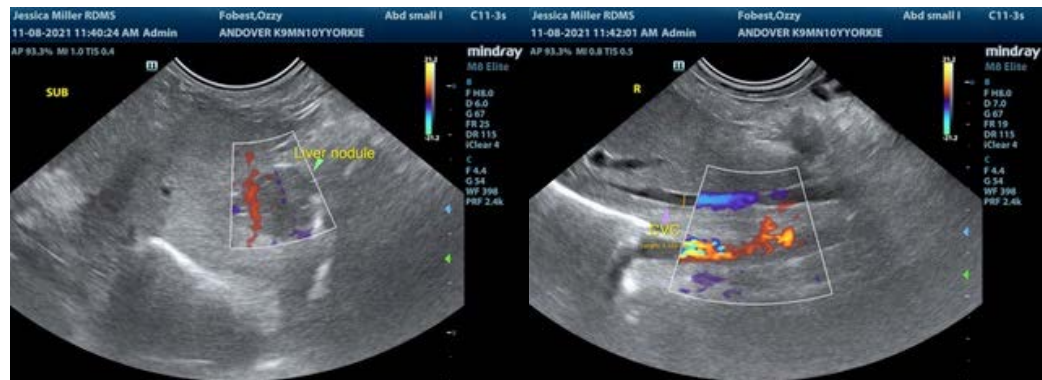
Dr. Vanderbogart

INVOICE

26931

DATE

11/8/21



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