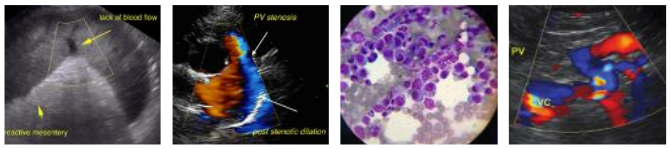
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Finn Pizzi

SPECIES
Canine

BREED
Hound X

SEX
Neutered Male

AGE
13 Years

WEIGHT
94 Pounds

INTERPRETED BY
Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Jenn

HOSPITAL NAME
Rockaway AH

REFERRING VET
Dr. Ascot

INVOICE
37676

DATE
5/17/22

PRESENTING CLINICAL SIGNS

acute onset resp distress hx of Cushings dz concern for severe chronic bronchitis elevated liver enzymes r/o additional underlying dz Current meds Vetroryl Theophylline Zeniquin Butorphanol CRI

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

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			1.1	1.11	40	90	0.6
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	0.8		3.0	3.5	

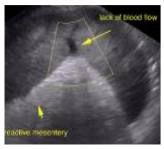
Cardiac Presentation

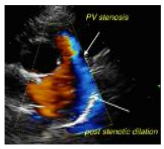
The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. Minor centralized mitral insufficiency noted in this patient, not clinically significant. The **left ventricle** presented thicknesses with linear contour and was not dilated nor 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.

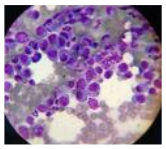
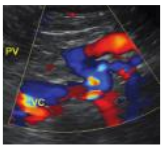
Urinary System

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 **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





SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Finn Pizzi

SPECIES
Canine

BREED
Hound X

SEX
Neutered Male

AGE
13 Years

WEIGHT
94 Pounds

INTERPRETED BY
Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Jenn

HOSPITAL NAME
Rockaway AH

REFERRING VET
Dr. Ascot

INVOICE
37676

DATE
5/17/22

increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. Pelvic mineralization noted in the left kidney. The left kidney measured 6.23 cm.

Adrenal Glands

The **left adrenal gland** appeared slightly enlarged and swollen. No evidence of focal capsular expansion or invasion into the phrenic veins were noted. No overt suspicion of neoplasia was noted. This is considered likely a hyperplastic change associated with stress or adrenal endocrinopathy (PDH). If isosthenuria is persistently present and the patient morphologically suggests Cushing's disease then ACTH testing would be indicated. The left adrenal gland measured 3.4 cm x 0.95 cm at the caudal pole and 1.0 cm at the cranial pole.

The **right adrenal gland** was enlarged and heterogeneous, measuring 1.9 cm at the cranial pole and 1.0 cm at the caudal pole.

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** was uniformly swollen with minor, excessive gallbladder debris and over distension with dependent and suspended bile without evidence of overt mucocele formation. However, excessive sludge was present. The liver presented coarse architecture with mildly increased portal markings and subtle, mixed echogenic changes. This is consistent with vacuolar hepatopathy and some level of remodeling and history of inflammatory component. There was no overt suspicion of neoplasia.

Gastrointestinal

The **stomach** revealed shadowing material measuring approximately 3.0 cm with gastric stasis. The small intestine and colon were unremarkable.

Pancreas

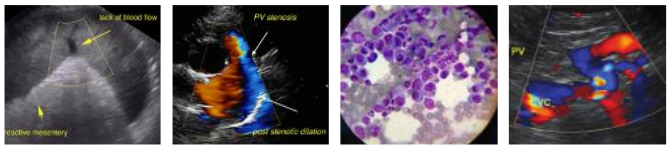
The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

ULTRASONOGRAPHIC FINDINGS

- Stage B1 valvular disease
- Bilateral adrenal hypertrophy
- Shadowing gastric material
- Benign hepatopathy
- Moderate degenerative renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Blood pressure measurements indicated. The heart is stable without clinical disease. No overt contraindication for anesthesia of brief to moderate duration. I suggest Torbutrol premed, Propofol induction, Isoflo maintenance or similar protocol if anesthesia is desired. Blood pressure recommended



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Finn Pizzi

SPECIES

Canine

BREED

Hound X

SEX

Neutered Male

AGE

13 Years

WEIGHT

94 Pounds

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway AH

REFERRING VET

Dr. Ascot

INVOICE

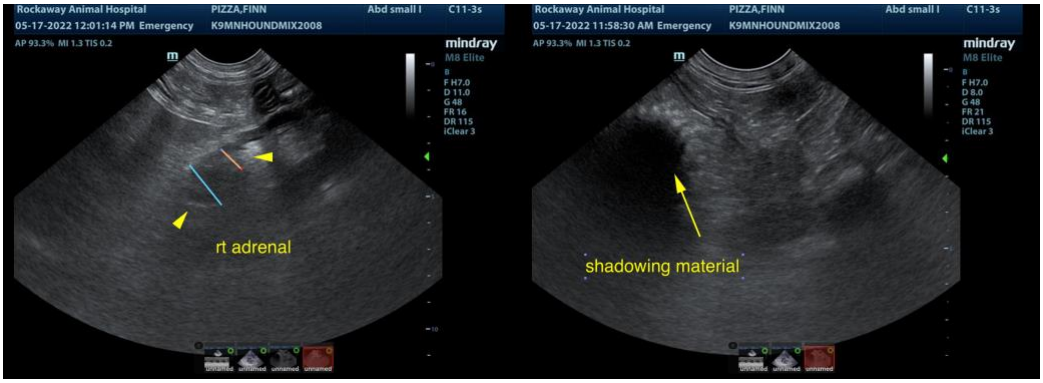
37676

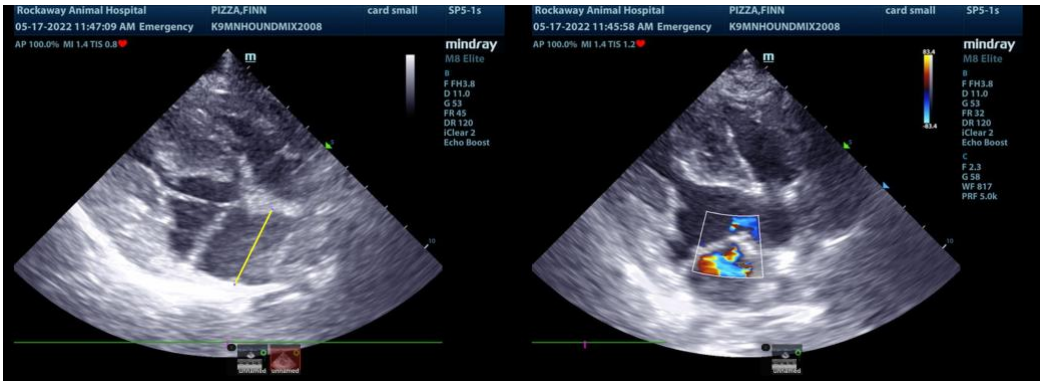
DATE

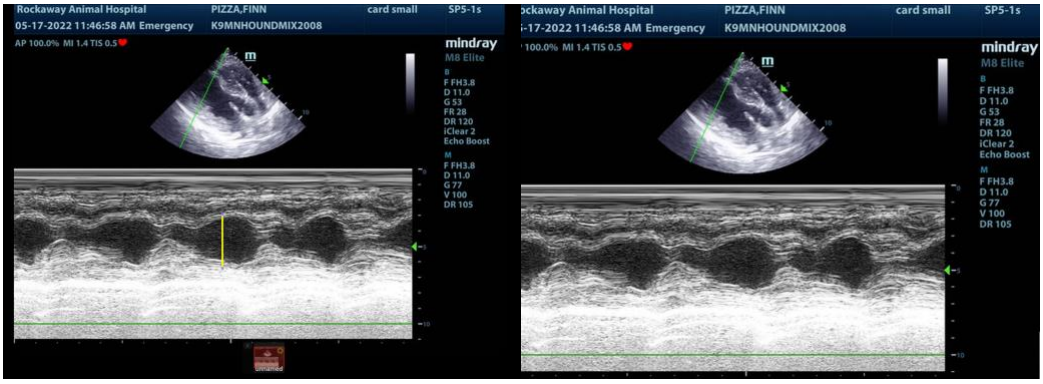
5/17/22

if not already performed and target white coat negative systolic pressure of < 160 mmHg. If higher than this ACE-inhibitor is suggested to reach this level. Recheck echocardiogram is recommended in 6 months, earlier if murmur grade increases or clinical signs initiate.

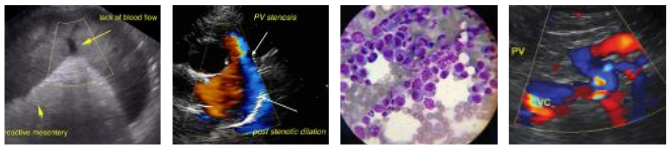
Blood pressure measurements warranted and reassessment of the clinical signs as to whether potential gastric foreign matter may be the issue. Recommend 24-hour NPO and recheck sonogram of the pyloric outflow to assess if the material is still present and not coalesced ingesta.







SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Finn Pizzi

SPECIES

Canine

BREED

Hound X

SEX

Neutered Male

AGE

13 Years

WEIGHT

94 Pounds

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway AH

REFERRING VET

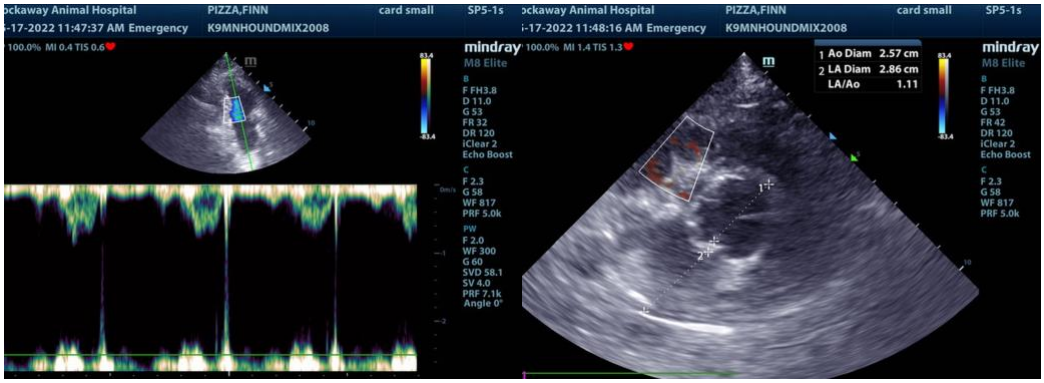
Dr. Ascot

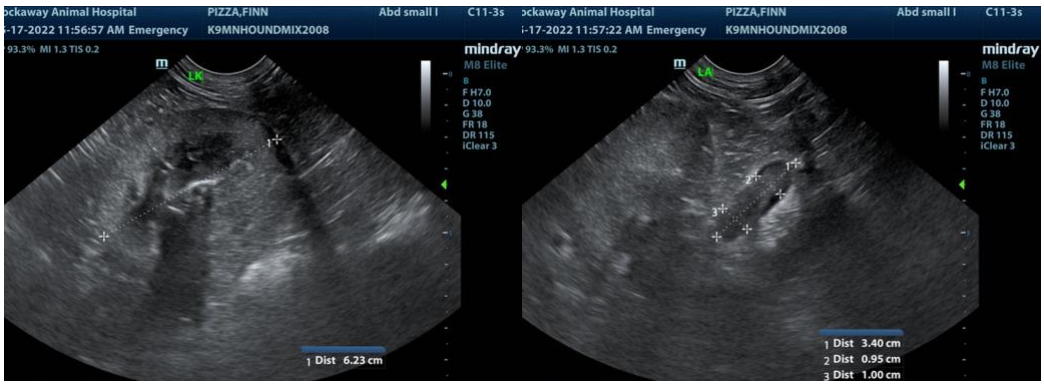
INVOICE

37676

DATE

5/17/22





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