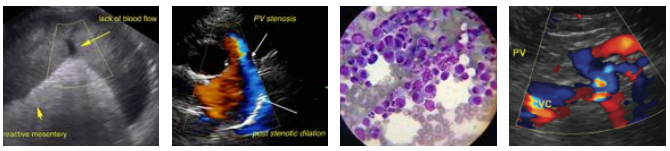
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
Corky Fisk

SPECIES
Canine

BREED
Cairn Terrier

SEX
Spayed female

AGE
12 years

INTERPRETED BY
Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Eric Lindquist, DMV DABVP, Cert. IVUSS

HOSPITAL NAME
Franklin Lakes AH

REFERRING VET
Dr. Onesios

INVOICE
42355

DATE
12/27/22

PRESENTING CLINICAL SIGNS

Elevated liver enzymes.

EKG revealed VPC's and Right wave amplitude.

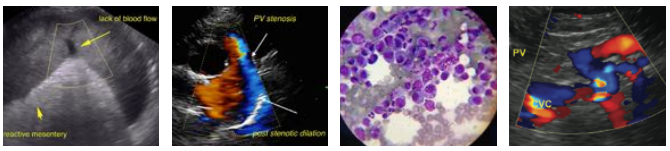
ALT 430, ALP 921

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. Trivial **mitral** valve insufficiency was noted at 5.5 m/sec. 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 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. Periodic and fairly frequent arrhythmia was noted in this patient. This is not a functional issue at this time.

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			NM	1.25	49	82	0.2
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	160	1.5	0.87		2.44 max	2.95	

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT
Corky Fisk

SPECIES
Canine

BREED
Cairn Terrier

SEX
Spayed female

AGE
12 years

INTERPRETED BY
Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Eric Lindquist, DMV DABVP, Cert. IVUSS

HOSPITAL NAME
Franklin Lakes AH

REFERRING VET
Dr. Onesios

INVOICE
42355

DATE
12/27/22

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

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 was 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 increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The left kidney measured 4.53 cm.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having largely normal shape, size, position and acceptable echogenicity for this age group and breed. Some heterogeneity was noted within the adrenal parenchyma without concerning capsular distortion. These changes are likely age related but should be monitored by sonogram should the patient be suspected of having adrenal disease. The left adrenal gland measured 2.12 x 0.52 cm at the cranial pole and 0.74 cm at the caudal pole. The right adrenal gland measured 1.9 x 0.93 cm at the cranial pole and 0.53 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 was noted.

Liver

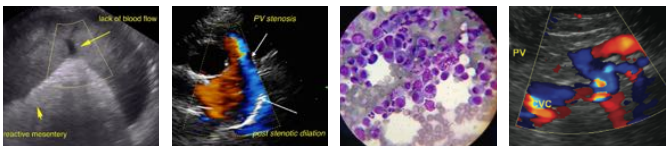
The **liver** revealed coarse architecture with increased portal markings. Isoechoic nodular changes were noted. A moderate amount of remolding was noted. The gallbladder and common bile duct were unremarkable.

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.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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



PATIENT

Corky Fisk

SPECIES

Canine

BREED

Cairn Terrier

SEX

Spayed female

AGE

12 years

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

HOSPITAL NAME

Franklin Lakes AH

REFERRING VET

Dr. Onesios

INVOICE

42355

DATE

12/27/22

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

Essentially normal echocardiogram with arrythmia and trivial mitral and tricuspid insufficiency, not clinically an issue. I recommend Holter monitor to assess for pathological arrhythmia that would necessitate treatment or preclude anesthesia.

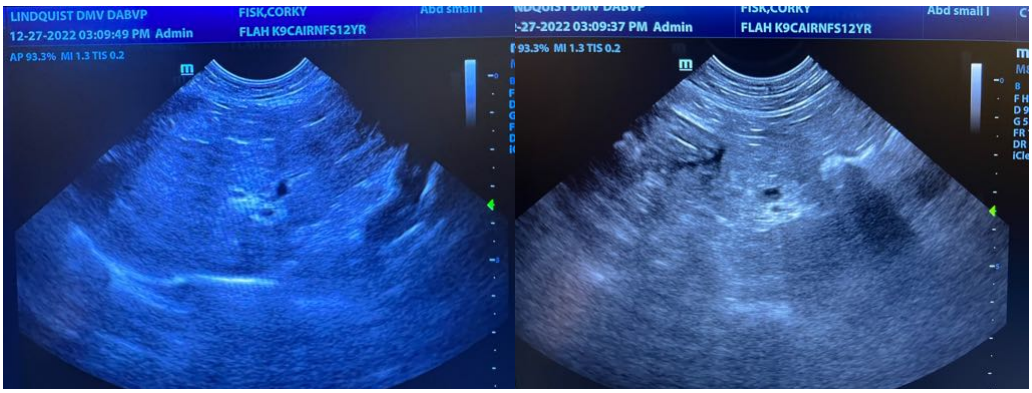
Moderate, degenerative hepatic disease. Chronic inflammatory hepatopathy, nodular hyperplasia pattern.

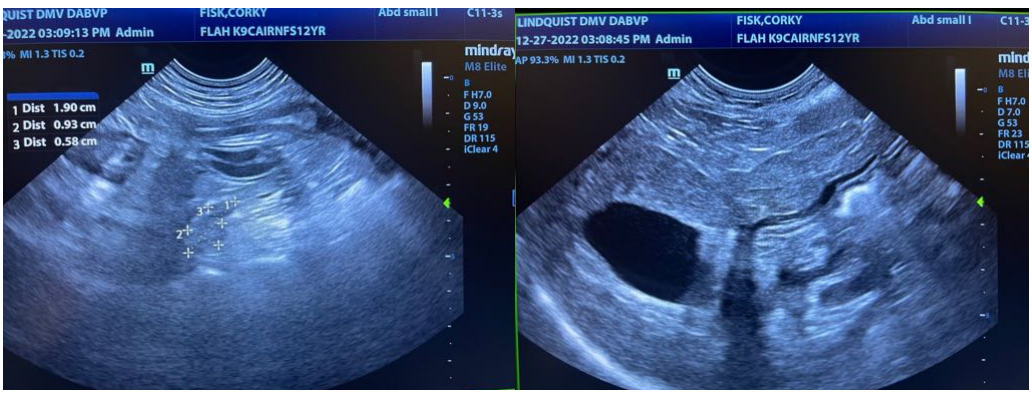
Otherwise, age related abdominal changes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

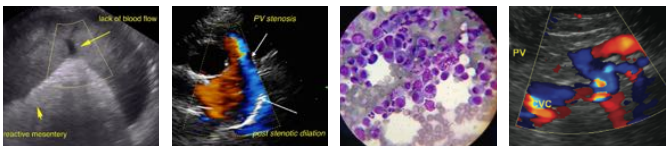
Structurally and functionally there is no contraindication to anesthetic procedure from an echocardiogram standpoint. However, a Holter monitor would be best to define this from an arrhythmia standpoint. Recheck echocardiogram is recommended in a year or earlier if murmur increases.

FNA or core biopsy can be considered. Bile acid profile is warranted. If the bile acids are normal then there is no overt anesthetic risk in this patient.





SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Corky Fisk

SPECIES

Canine

BREED

Cairn Terrier

SEX

Spayed female

AGE

12 years

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

HOSPITAL NAME

Franklin Lakes AH

REFERRING VET

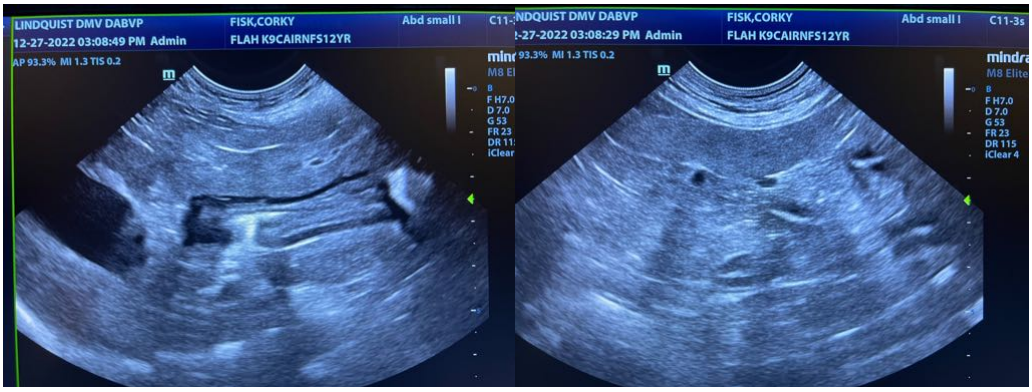
Dr. Onesios

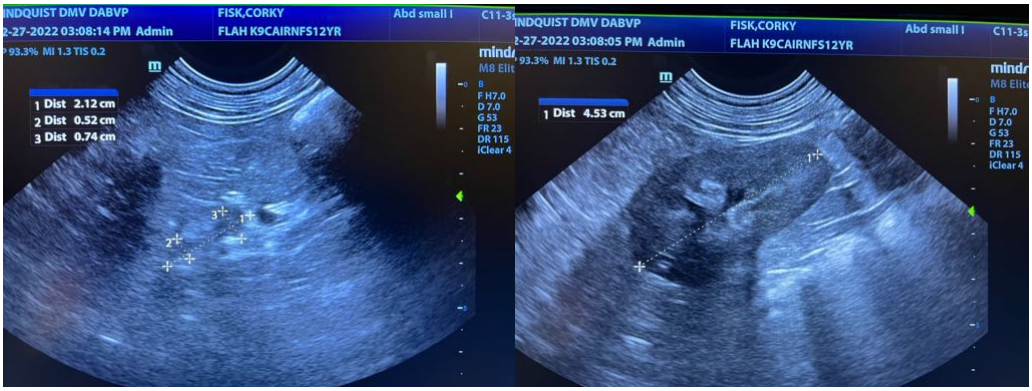
INVOICE

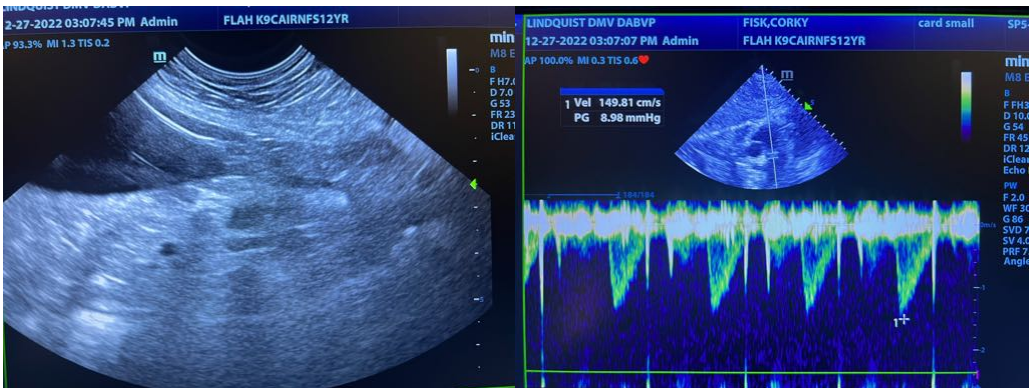
42355

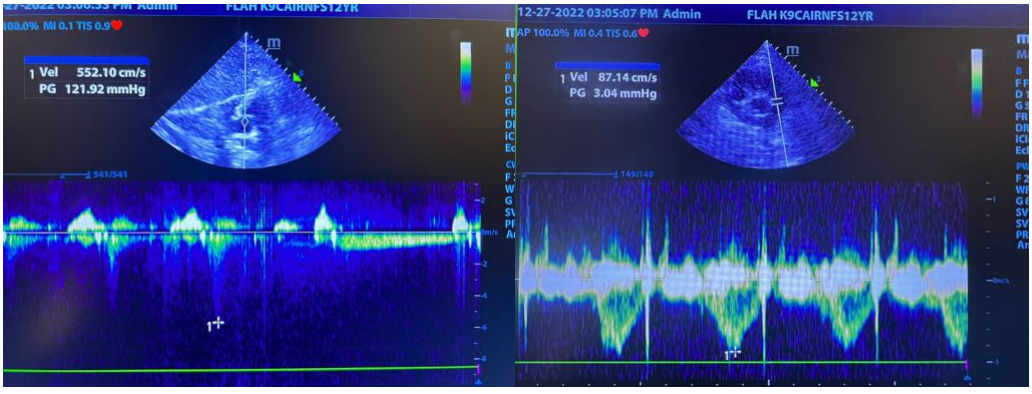
DATE

12/27/22

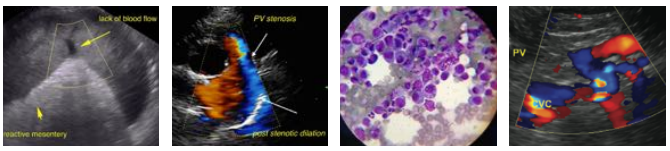








SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Corky Fisk

SPECIES

Canine

BREED

Cairn Terrier

SEX

Spayed female

AGE

12 years

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

HOSPITAL NAME

Franklin Lakes AH

REFERRING VET

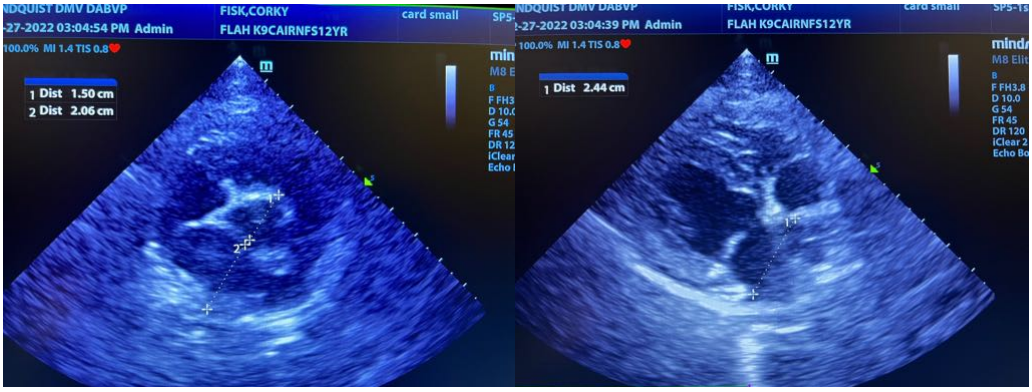
Dr. Onesios

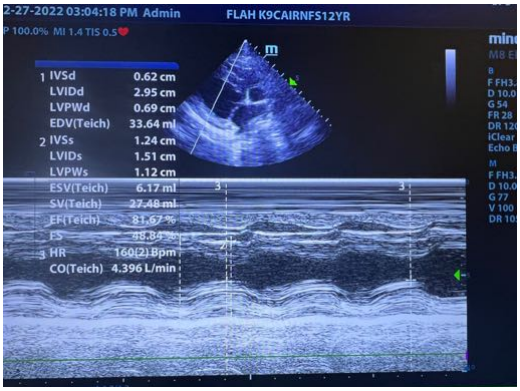
INVOICE

42355

DATE

12/27/22





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