



PATIENT

Chaz Mando

PRESENTING CLINICAL SIGNS

Recheck

SPECIES

Canine

BREED

Cocker Spaniel

SEX

Neutered male

AGE

12 years

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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** insufficiency was noted and consistent with early, yet compensated pulmonary hypertension. 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. Persistent arrhythmia was noted with periodic ectopy present.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Animal Care Center of
Flanders

REFERRING VET

Dr. Hallihan

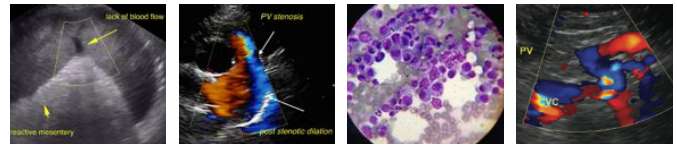
INVOICE

42446

DATE

1/31/23

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	5.2	3.3	1.1		42	74	NM
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	94	1.86				3.42	



PATIENT

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Chaz Mando

Urinary System

SPECIES

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.

BREED

Cocker Spaniel

SEX

Neutered male

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. Slight irregular contour was noted as well as multi-centric cortical cysts with pyelectasia. The left kidney measured 5.5 cm. The right kidney measured 6.82 cm.

AGE

12 years

Adrenal Glands

The left **adrenal gland** was normal in size and contour. Caudal to the left adrenal gland is a hypoechoic cyst or nodule measuring 2.37 x 0.85 cm and appears stable. The recognizable adrenal gland measured 2.17 x 0.41 cm. The right adrenal gland measured 2.16 x 1.3 cm at the cranial pole and 0.72 cm at the caudal pole.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

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.

IMAGING PERFORMED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Animal Care Center of
Flanders

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. Hypoechoic, heterogenous parenchymal changes were noted and consistent with hyperplasia. This is consistent with vacuolar hepatopathy and some level of remodeling and history of inflammatory component. There was no overt suspicion of neoplasia.

REFERRING VET

Dr. Hallihan

INVOICE

42446

DATE

1/31/23

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.



PATIENT

Pancreas

Chaz Mando

The **pancreas** revealed moderate degenerative changes with remodeling and was non-painful upon imaging. This is consistent with hyperplasia and fibrosis.

SPECIES

Canine

ULTRASONOGRAPHIC FINDINGS

Geriatric abdominal changes.

BREED

Cocker Spaniel

Moderate degenerative renal changes with cystic hyperplasia.

Likely lymph node cyst adjacent to the left adrenal gland.

SEX

Neutered male

Nodular hyperplasia, vacuolar hepatopathy liver pattern.

Pancreatic remodeling.

Trivial mitral and tricuspid insufficiency with mild pulmonary hypertension and arrhythmia.

AGE

12 years

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

EKG is indicated +/- Holter monitor. Full CNS and/or orthopedic exam is warranted to assess for CNS disease and/or orthopedic pain that may be playing a role in the clinical history.

INTERPRETED BY

Eric Lindquist, DMV, DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV, DABVP, Cert. IVUSS

HOSPITAL NAME

Animal Care Center of Flanders

REFERRING VET

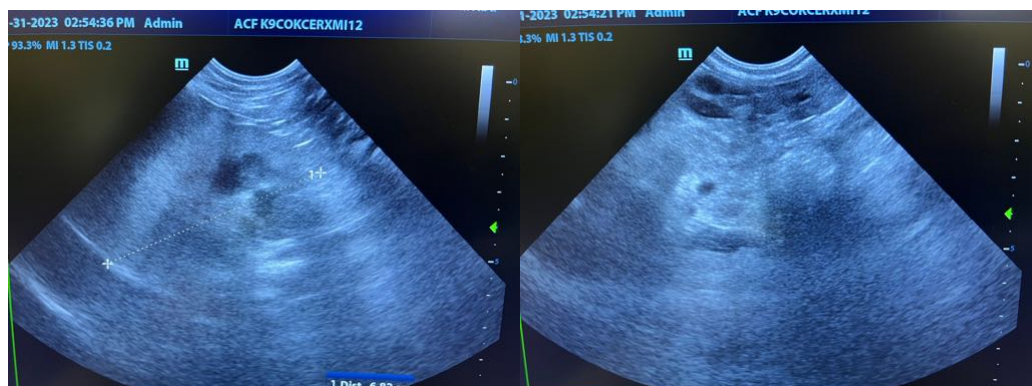
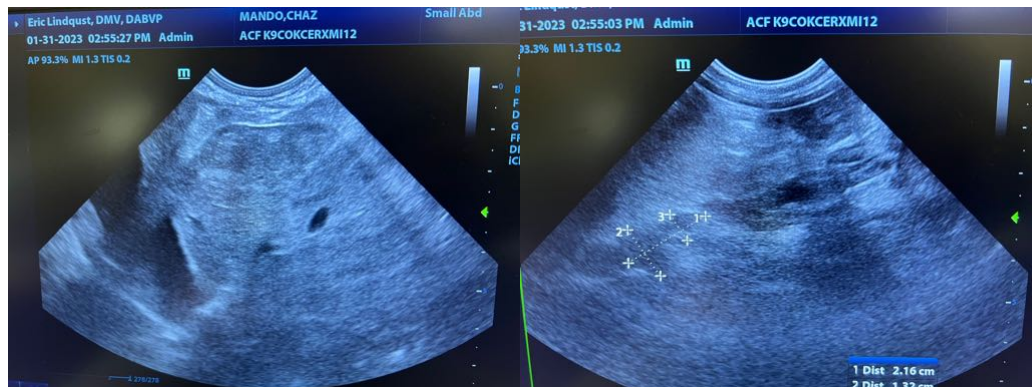
Dr. Hallihan

INVOICE

42446

DATE

1/31/23





PATIENT

Chaz Mando

SPECIES

Canine

BREED

Cocker Spaniel

SEX

Neutered male

AGE

12 years

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Animal Care Center of
Flanders

REFERRING VET

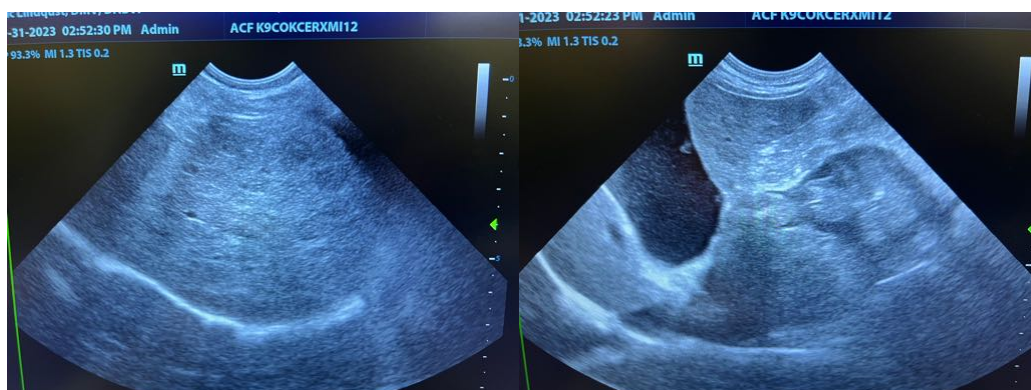
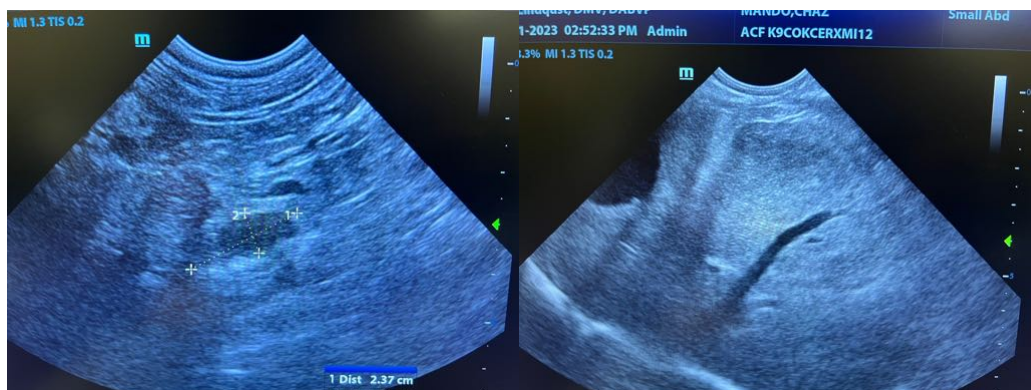
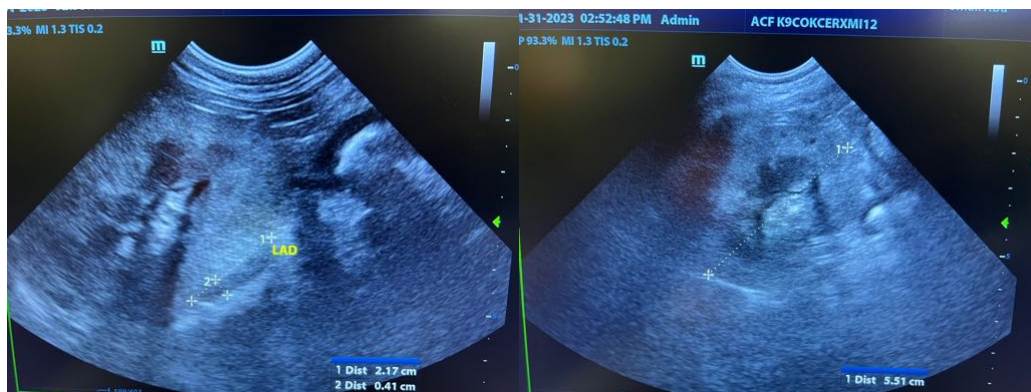
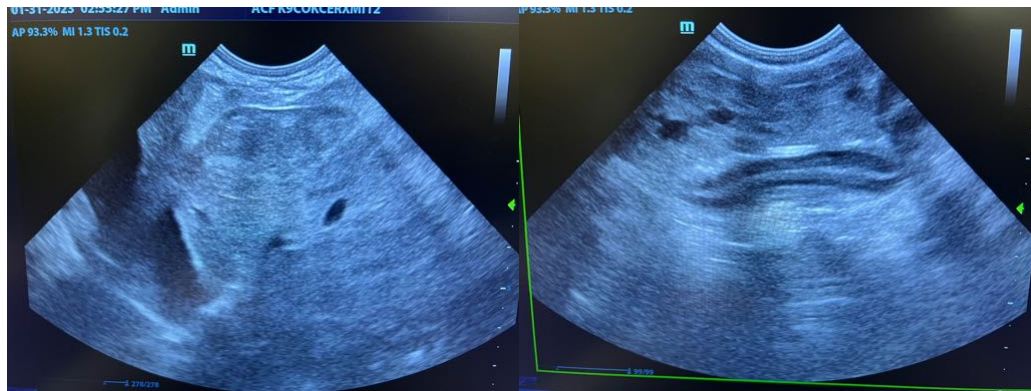
Dr. Hallihan

INVOICE

42446

DATE

1/31/23





PATIENT

Chaz Mando

SPECIES

Canine

BREED

Cocker Spaniel

SEX

Neutered male

AGE

12 years

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Animal Care Center of
Flanders

REFERRING VET

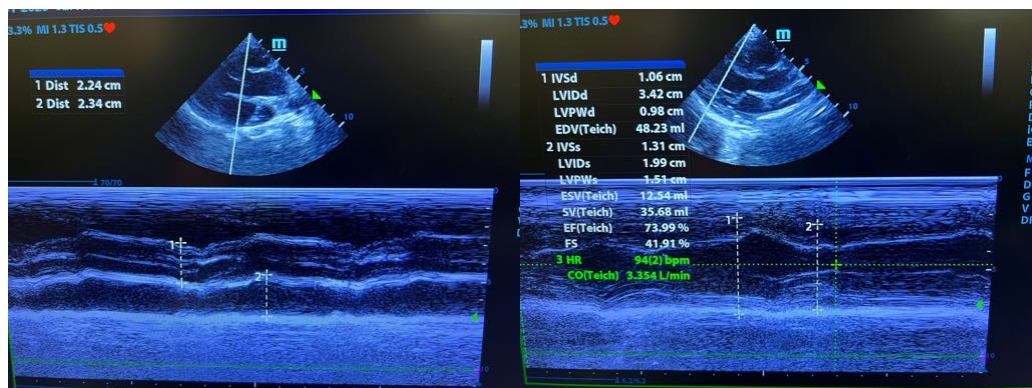
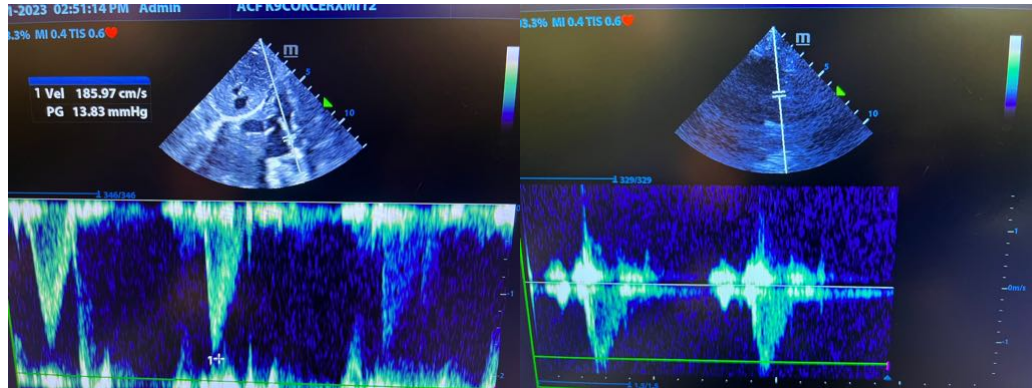
Dr. Hallihan

INVOICE

42446

DATE

1/31/23



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