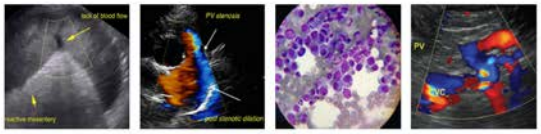
Pennsylvania Mobile
VETERINARY ULTRASOUND SERVICES
IMAGING PERFORMED BY
PAMobileVet.com 443-794-4700



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Jughead Pittari

SPECIES

Canine

BREED

Coonhound

SEX

Neutered Male

AGE

2011

WEIGHT

65

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Rebekah Jakum, CVT
ARDMS/RVT

HOSPITAL NAME

Maple Hills VH

REFERRING VET

Dr. Eckman

INVOICE

43833

DATE

7/13/23

PRESENTING CLINICAL SIGNS

Chronic wheezing episode, more often at night, nasal discharge responsive to antibiotic therapy, elevated liver values. Medication: Vetoryl, Denamarin, Ursodiol, doxycycline.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

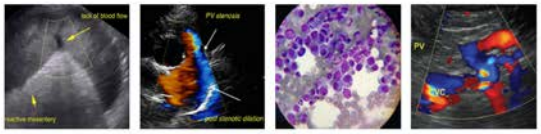
CANINE CARDIAC PARAMETERS	**MR VMAX** (m/s)	**TR VMAX** (m/s)	**LA/AO** (Boon method)	**LA/AO** (Heart Base; Swe)	**FS** (%)	**EF** (%)	**EPSS** (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT			NM	1.3	35	--	0.1
CANINE CARDIAC PARAMETERS	**HR** (BPM)	**AV VMAX** (m/s)	**PV 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	80	1.3	1.0		3.7	4.2	

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. Trivial **mitral** insufficiency noted with eccentric jet, 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 pelvic urethra was imaged 2.0 cm beyond the cystourethral junction.



PATIENT

Jughead Pittari

SPECIES

Canine

BREED

Coonhound

SEX

Neutered Male

AGE

2011

WEIGHT

65

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Rebekah Jakum, CVT ARDMS/RVT

HOSPITAL NAME

Maple Hills VH

REFERRING VET

Dr. Eckman

INVOICE

43833

DATE

7/13/23

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 right kidney measured 7.0 cm. The left kidney measured 7.25 cm.

Adrenal Glands

The **right adrenal gland** was slightly heterogeneous and mildly irregular measuring 3.49 cm x 1.04 cm at the cranial pole and 0.87 cm at the caudal pole.

The **left adrenal gland** was upper limits of normal to slightly enlarged, measuring 3.6 cm x 0.81 cm at the caudal pole and 0.94 cm at the cranial pole.

Spleen

The **spleen** was enlarged and swollen with irregular contour with micronodular changes and mild disruption of architecture. FNA warranted to assess for hyperplasia versus emerging round cell neoplasia or minor potential for splenitis.

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. Gallbladder wall was slightly echogenic and fibrosed. 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

There was some residual chyme and gas was noted in the **stomach**, yet not pathological. This is consistent with end post prandial presentation. Transit of chyme into the small intestine was normal. Curvilinear patterns were maintained throughout the GI tract. No evidence of pathology. 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.

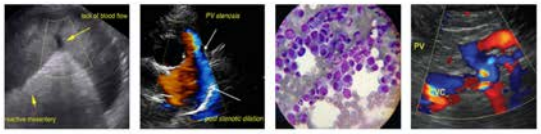
Pancreas

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

- Bilateral adrenal enlargement with minor remodeling
- Splenic enlargement with micronodular changes
- Swollen liver and gallbladder debris
- Age related renal changes
- Normal echocardiogram

Pennsylvania Mobile
VETERINARY ULTRASOUND SERVICES
IMAGING PERFORMED BY
PAMobileVet.com 443-794-4700



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Jughead Pittari

SPECIES

Canine

BREED

Coonhound

SEX

Neutered Male

AGE

2011

WEIGHT

65

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Rebekah Jakum, CVT
ARDMS/RVT

HOSPITAL NAME

Maple Hills VH

REFERRING VET

Dr. Eckman

INVOICE

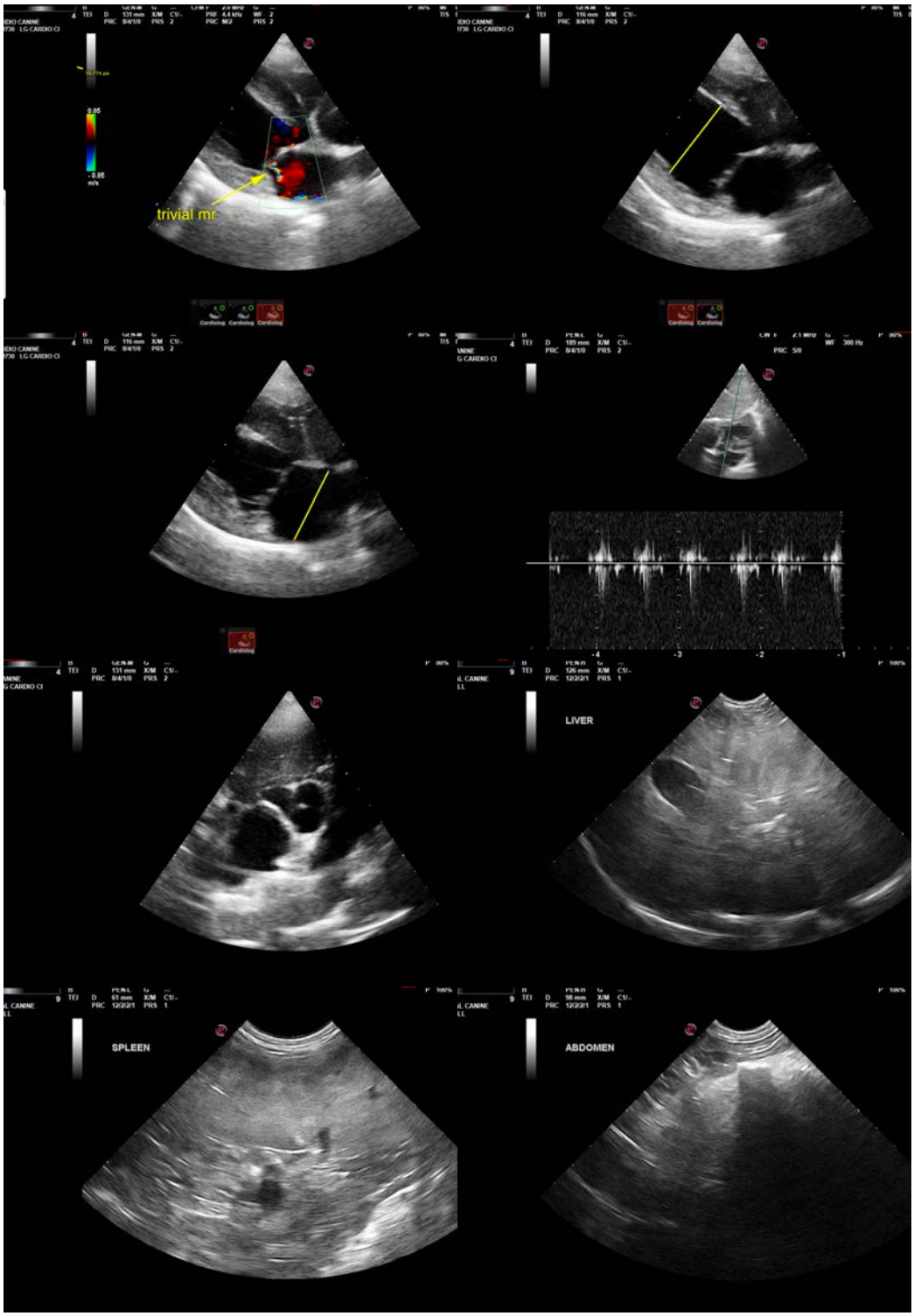
43833

DATE

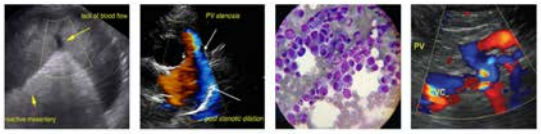
7/13/23

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Splenic FNA warranted. Blood pressures warranted. No evidence of cardiac disease related to the clinical status. Given the wheezing and clinical signs, recommend skull +/- chest CT to assess the respiratory tree. Endoscopy may be appropriate as well. Blood pressure measurements warranted.



Pennsylvania Mobile
VETERINARY ULTRASOUND SERVICES
IMAGING PERFORMED BY
PAMobileVet.com 443-794-4700



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

PATIENT

Jughead Pittari

SPECIES

Canine

BREED

Coonhound

SEX

Neutered Male

AGE

2011

WEIGHT

65

INTERPRETED BY

Eric Lindquist, DMV

DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Rebekah Jakum, CVT
ARDMS/RVT

HOSPITAL NAME

Maple Hills VH

REFERRING VET

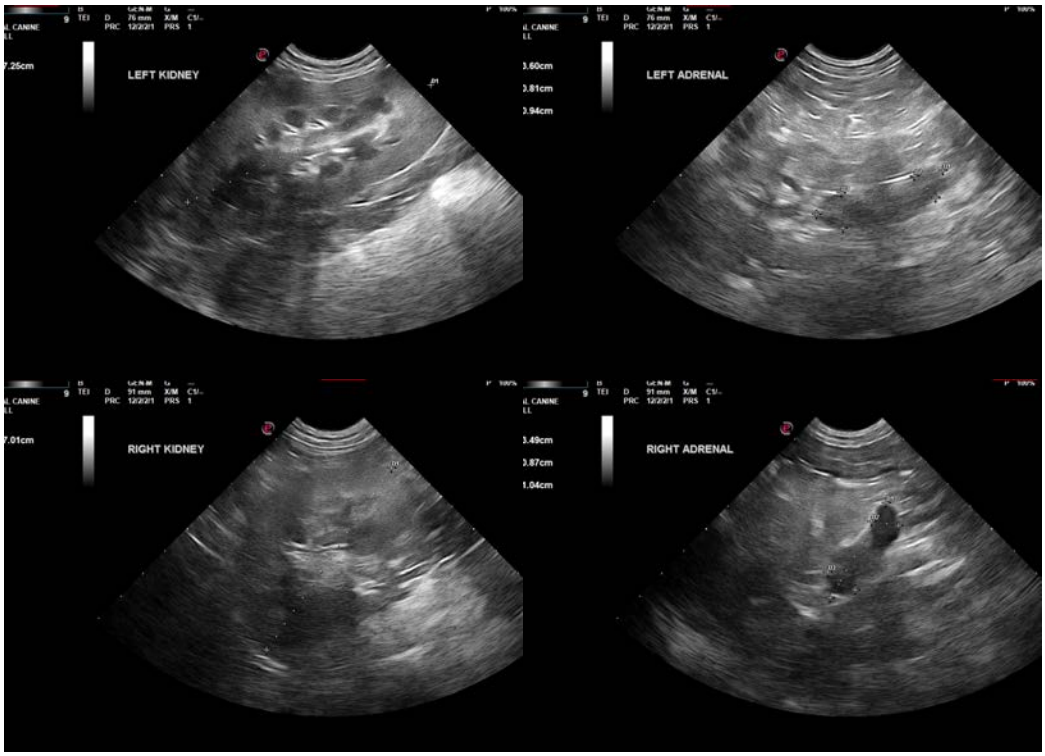
Dr. Eckman

INVOICE

43833

DATE

7/13/23



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