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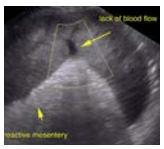
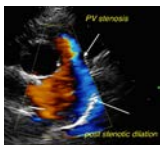
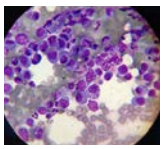
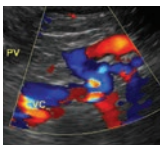
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Leo Egbert

SPECIES

Feline

BREED

DSH

SEX

Neutered Male

AGE

1 Year

WEIGHT

7 Pounds

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Sarah Green

HOSPITAL NAME

Healing Spirit

REFERRING VET

Dr. Sarah Green

INVOICE

26191

DATE

10/11/21

PRESENTING CLINICAL SIGNS

progressive hyporexia and lethargy 1 month duration.
Abnormal PE/Chem/CBC/UA Results: tetraparesis, ascites, tachycardia, grade iv/vi systolic murmur CHEM: Tbili=1.3 (0.1-0.6) mg/dL, TP=10.1 (5.4-8.2) g/dL, globulin=7.0 (1.5-5.7) g/dL fluid analysis: yellow fibrinous fluid, Rivalta positive cytology: non degenerate neutrophil and macrophages FIP PCR pending

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

FELINE CARDIAC PARAMETERS	**BODY WEIGHT** (kg)	**HR** (BPM)	**IVSd** (cm)	**LVIDd** (cm)	**LVWd** (cm)	**FS** (%)	**EF** (%)
NORMAL PARAMETER	------	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
PATIENT		NM	0.4	1.0	0.57	55	90
FELINE CARDIAC PARAMETERS	**LA/AO** (Boon)	**LA/AO HEART BASE** (Sisson)	**LA** 2D 4-chamber long axis AS to FW (Sisson) (cm)		**LVOT VEL.** (m/s)	**RVOT VEL.** (m/s)	**IVRT** (m/)
NORMAL PARAMETER	<1.5	0.88-1.79	0.7-1.7		<1.6	<1.3	40-60
PATIENT	1.0		1.2				NM

Adapted from June Boon,Veterinary Echocardiography,1998
Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate LA measurements. The cranial and caudal **mitral** valve leaflets presented normal linear structure and kinetics.. 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 and angles 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 or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinetics. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** 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 or extra cardiac pathology in the visible planes. The cranial **mediastinum and pericardial 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.

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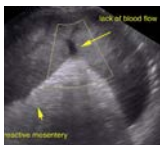
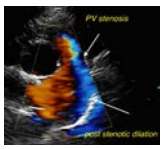
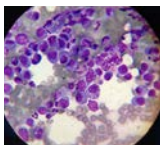
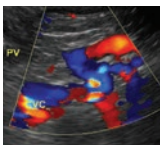

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The **kidneys** were thickened and irregular with hyperechoic medullary rim sign. Pericapsular fluid accumulation noted. Hyperechoic cortical striations were noted in the kidneys .

Adrenal Glands

The **adrenal glands** were uniform, yet bilaterally swollen and hypoechoic. This is most consistent with stress-induced hyperplasia.

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** revealed coarse architecture and increased portal markings. No evidence of passive congestion.

Gastrointestinal

The **gastrointestinal tract**, per se, was unremarkable.

Pancreas

The **pancreas** was obscured by hyperechoic surrounding mesentery.

Free Abdomen

A moderate amount of free fluid was noted with echogenic debris and enhanced mesentery and adhesions.

ULTRASONOGRAPHIC FINDINGS

- Normal echocardiogram, likely flow murmur
- Swollen irregular kidneys
- Echogenic free fluid

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of congenital or acquired cardiac pathology. Strongly suggestive for FIP. FIP titer upon the free fluid as well as 25-gauge FNA of the kidneys would be appropriate. Round cell neoplasia is also a remote potential.

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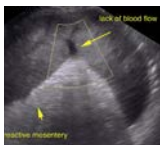
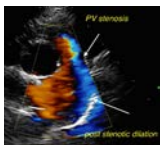
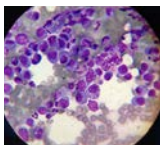
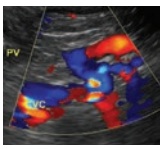

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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com