



PATIENT PRESENTING CLINICAL SIGNS

Marlowe Hall History: 6 week history of hyporexia and weight loss, no C/S/V/D/PU/PD

SPECIES Abnormal PE/Chem/CBC/UA Results: Grade III/VI systolic parasternal murmur. Thoracic radiographs revealed no cardiopulmonary abnormalities, no cardiomegaly fPL= 2.5 (3.5 WNL) CBC: WBC=5170 (5500-19500) /uL, lymphocytes=690 (1500-7000) /uL, MCHC=27.7 (30.0-36.0) g/dL, platelets=212 (300.0-800.0) K/uL CHEM: P=2.4 (3.4-8.5) mg/dL, K=3.6 (3.7-5.8) mmol/L T4=1.8 (1.5-4.8) ug/dL

Feline

BREED ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

DSH

SEX

Neutered Male

AGE

8 Years

WEIGHT

9.4 Pounds

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	1.4	0.4	--	45
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	1.15	1.6	--	--	--	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

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

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

IMAGING PERFORMED BY

Desen Ertunc

HOSPITAL NAME

Healing Spirit AW

REFERRING VET

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The **urinary bladder** and visible pelvic urethra were unremarkable for the level of repletion presented. The urine, however, did present some mildly echogenic debris consistent with mucous, exfoliated cells from renal or bladder origin, and/or blood clots as these echogenic changes can all present similarly. This is often related to urinary tract infection but may represent simple evidence of exfoliated debris or sterile inflammation. Cystocentesis, urinalysis, +/- culture would be recommended to rule out and define any UTI.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some minor 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 kidneys measured 4.0 cm each.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The right adrenal gland measured 0.42 cm. The left adrenal gland measured 0.32 cm.

Spleen

The **spleen** was largely normal with hyperechoic lipogranulomatous changes.

Liver

The **liver** was diffusely hyperechoic to falciform fat with attenuating sound beam. Generalized hepatomegaly present. Vascularity appeared normal. The gallbladder and common bile duct were unremarkable.

Gastrointestinal

The **gastrointestinal tract** revealed minor variable thickening and echogenic submucosal changes most consistent with low grade end result of chronic GI disease such as IBD and may be related to malassimilation of nutrients if any weight loss is present. No obvious neoplastic patterns were noted and luminal content as 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

- Normal echocardiogram
- Hepatic lipidosis pattern
- Unremarkable abdomen otherwise
- Minor intestinal thickening

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS



PATIENT

Marlowe Hall

No cause of hyporexia and weight loss. Assessment for orthopedic pain or other causes of anorexia are warranted. Maldigestion panel, three view chest radiographs and full CNS examination is recommended to examine for occult disease that could be responsible for the weight loss. Evaluation for competitive eating environments should also be considered.

SPECIES

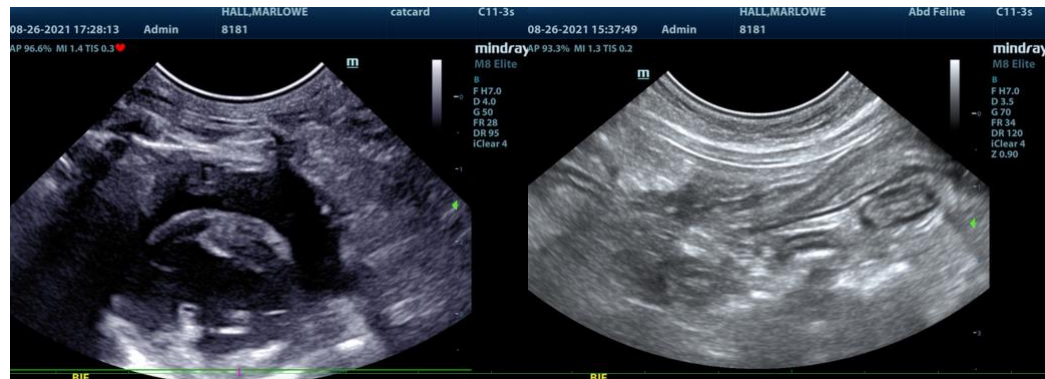
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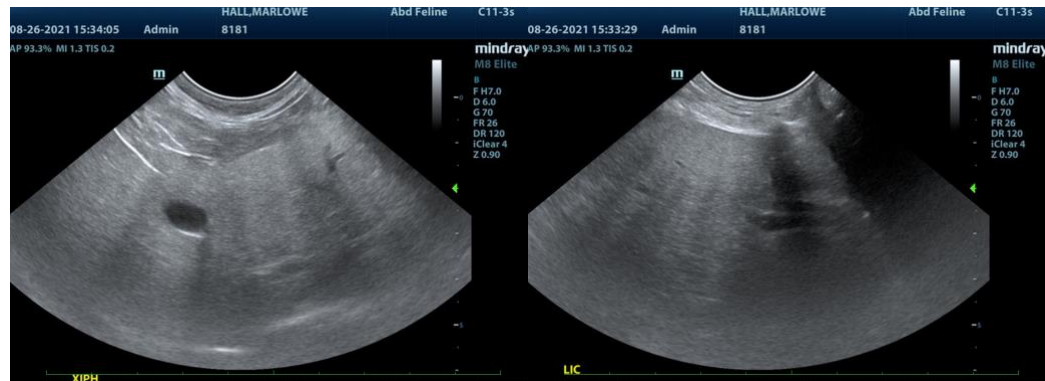
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Neutered Male



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8 Years



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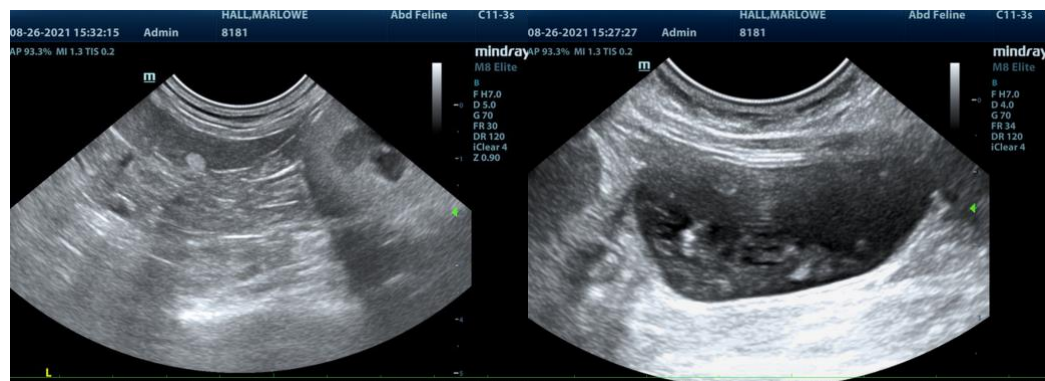
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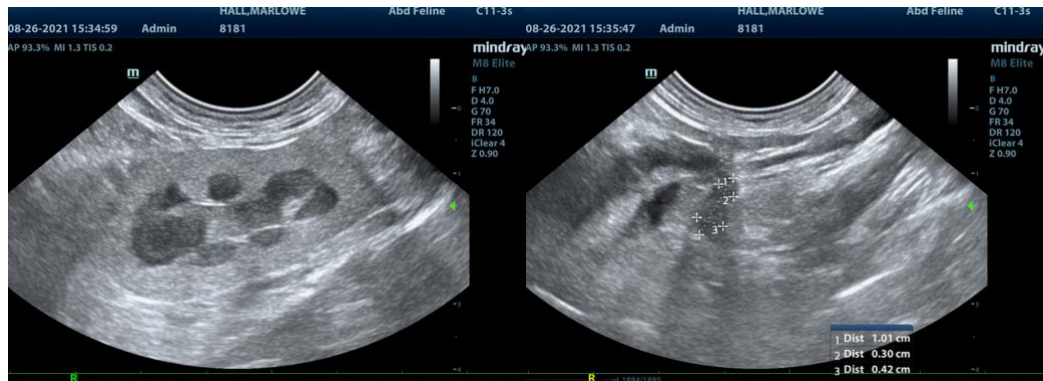
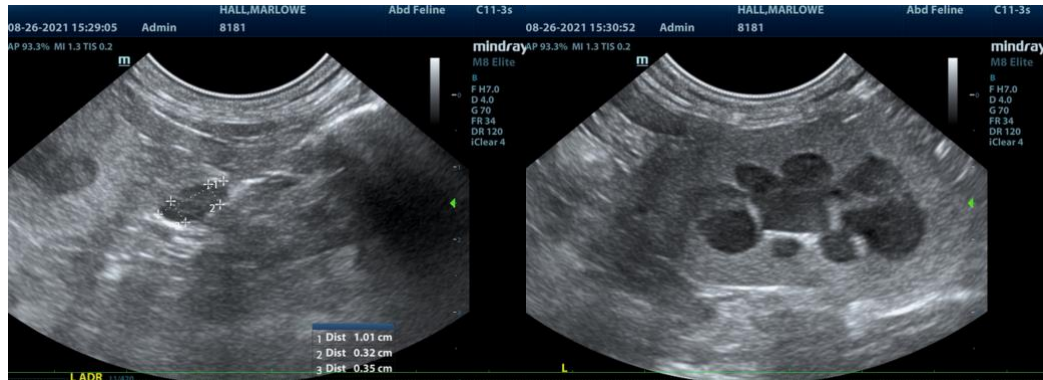
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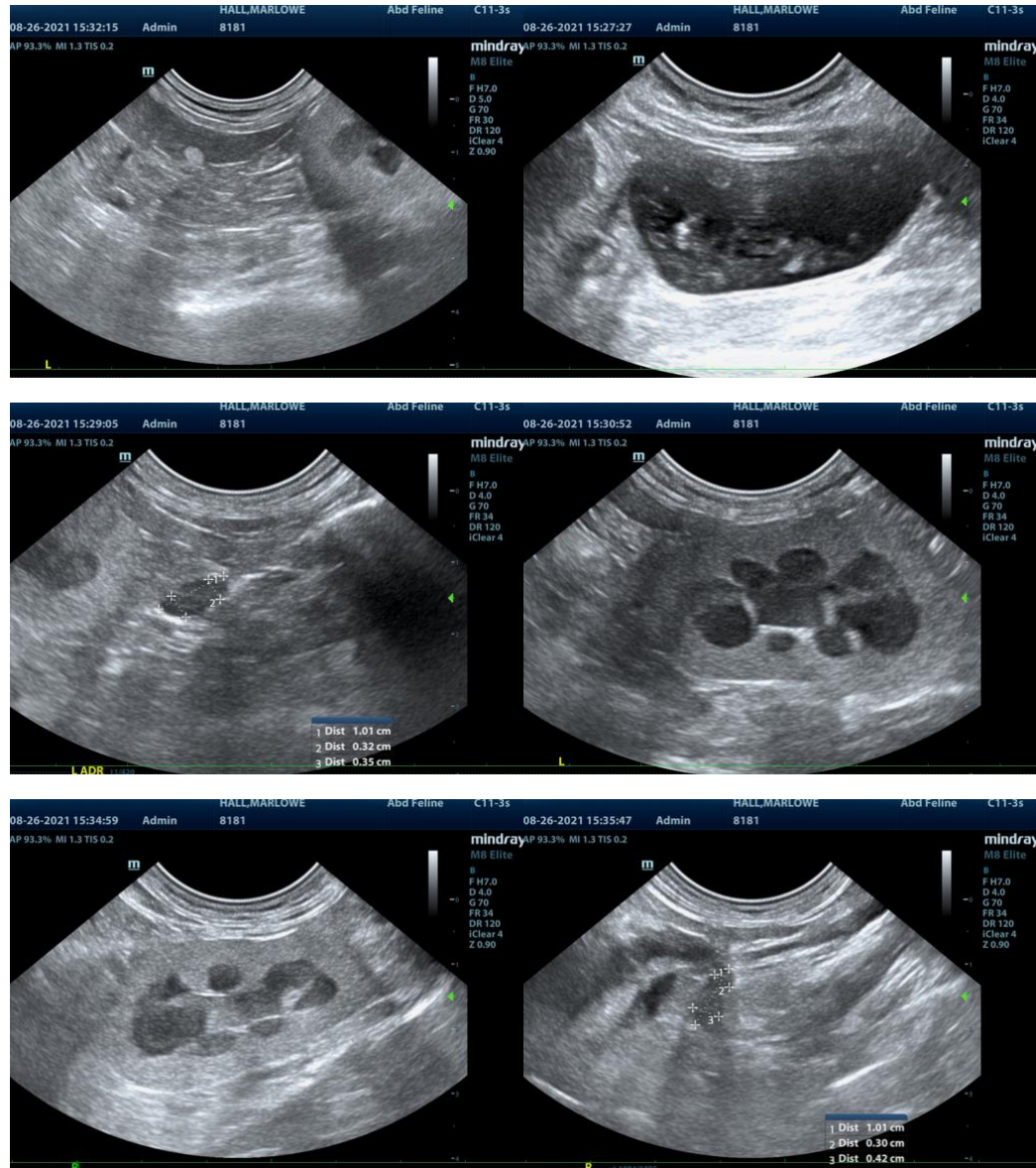
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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info@SonoPath.com