



PATIENT

Jerry Kennedy

PRESENTING CLINICAL SIGNS

History: pleural effusion, anorexia, lethargy decreased thirst
Abnormal PE/Chem/CBC/UA Results: decreased HCT 19.6

SPECIES

Feline

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.

BREED

Domestic Shorthair

SEX

Neutered male

The **right kidney** 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. Corticomedullary mineralization was noted in the kidneys. The right kidney measured 3.47 cm. The left kidney revealed a 1.3 cm mass with peripheral inflammation. The left kidney itself measured 3.53 cm.

AGE

17 years

WEIGHT

11.5 lbs

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.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

Spleen

The **spleen** in this patient was uniform, yet volume contracted. Hydration status should be assessed.

IMAGING PERFORMED BY

Jenn

Liver

HOSPITAL NAME

Rockaway AH

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Hypoechoic nodular changes were noted. This is strongly suggestive for metastatic disease. Some age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.

REFERRING VET

Dr. Bednar

INVOICE

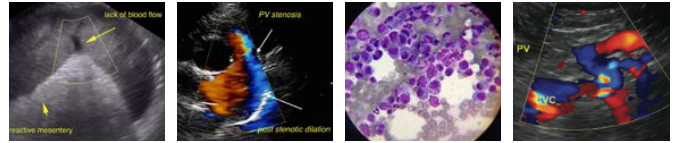
43192

Gastrointestinal

DATE

12/17/22

The **gastrointestinal tract** revealed a normal stomach. An intestinal mass was noted and measured 3.5 x 3.0 cm in the jejunum with regional inflammation.



PATIENT

Jerry Kennedy

Pancreas

SPECIES

Feline

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

BREED

Domestic Shorthair

SEX

Neutered male

AGE

17 years

WEIGHT

11.5 lbs

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

The echocardiogram in this patient demonstrated enlarged **left atrial** size. The **mitral** valve revealed insufficiency. The **left ventricle** in this patient revealed myocardial remodeling and sectorial hypertrophy. 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** insufficiency was noted. 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). Trace **pericardial** effusion was noted. **Pleural effusion** was noted through the abdomen. This may be cardiogenic from left-sided failure or owing to metastatic disease. The extra cardiac space revealed pleural effusion, justifiably from left-sided failure or from metastatic phenomenon from the abdominal pathology.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway AH

REFERRING VET

Dr. Bednar

INVOICE

43192

DATE

12/17/22

FELINE CARDIAC PARAMETERS	BODY WEIGHT	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	11.5 lbs	NM					
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	2.0	2.3					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							

ULTRASONOGRAPHIC FINDINGS

Multi-centric lymphoma pattern in the intestine, likely left kidney, likely liver with pleural effusion. Pericardial effusion.

Unclassified cardiomyopathy with myocardial remodeling and left sided failure.



PATIENT

Jerry Kennedy

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

17 years

WEIGHT

11.5 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway AH

REFERRING VET

Dr. Bednar

INVOICE

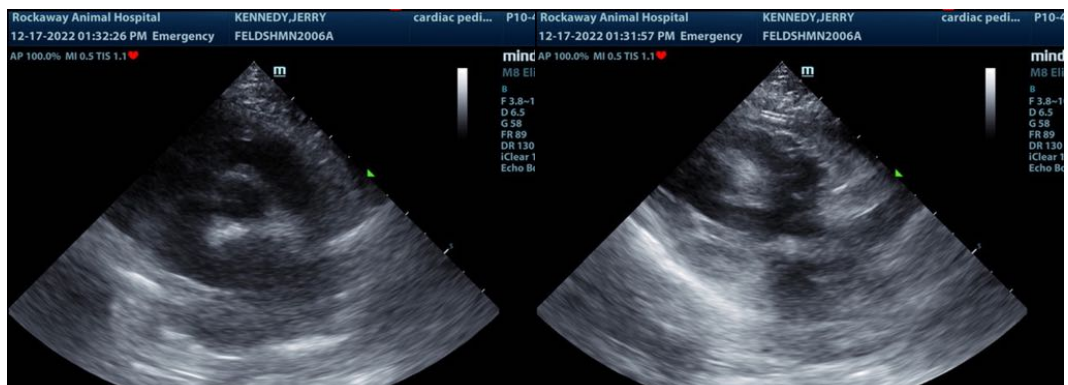
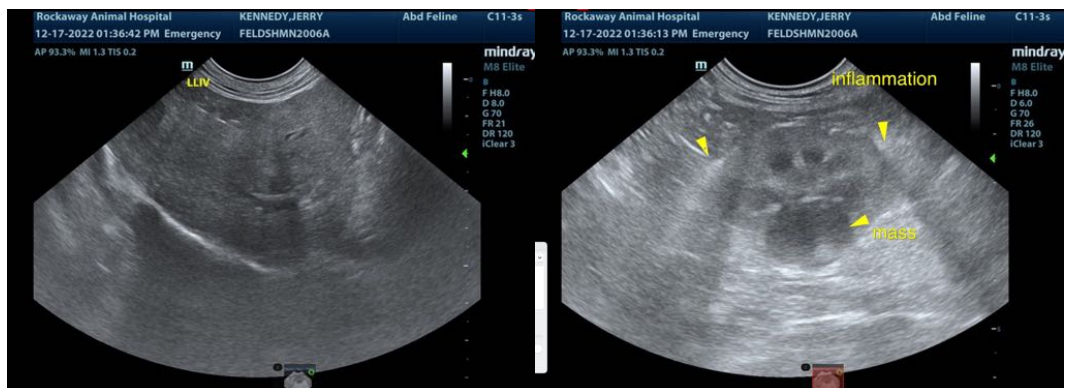
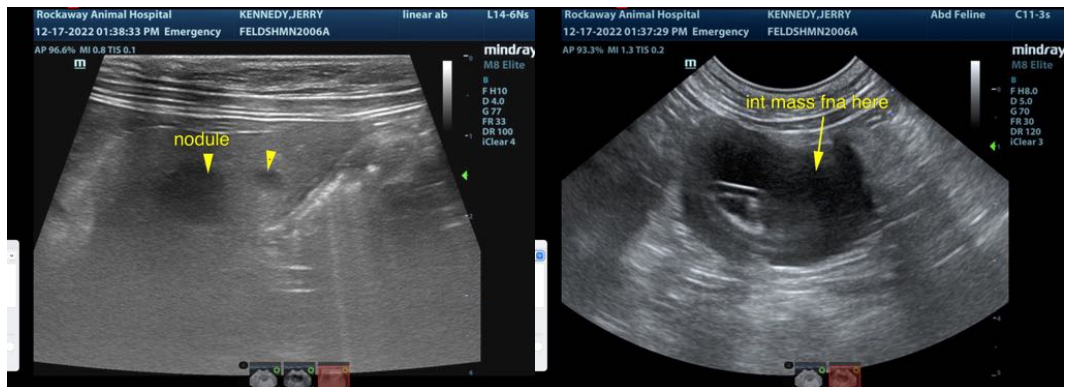
43192

DATE

12/17/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

An effector organ issue may be occurring owing to systemic neoplasia upon the heart exacerbating the volume overload and dysfunction. Empirical measurements with Lasix at 12.5 mg b.i.d. can be considered. Pleurocentesis and cytospin, FNA of the intestinal mass, kidney and liver are ideal. An ace inhibitor is also indicated. Given the anemia bone marrow disease may also be playing a role. The prognosis is poor depending on the ability to respond to eventual chemotherapy.





PATIENT

Jerry Kennedy

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

17 years

WEIGHT

11.5 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Jenn

HOSPITAL NAME

Rockaway AH

REFERRING VET

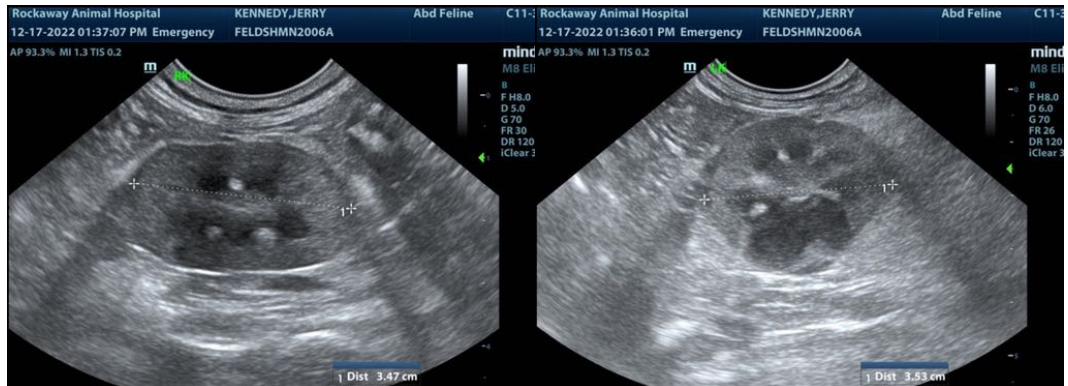
Dr. Bednar

INVOICE

43192

DATE

12/17/22



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