



**PATIENT**

**PRESENTING CLINICAL SIGNS**

Nikki Millen

History of melanoma in the right eye.

**SPECIES**

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Feline

**Urinary System**

**BREED**

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.

Russian Blule

**SEX**

The left **kidney** in this patient presented multi-focal, expansive, hypoechoic nodules with peripheral inflammation. The largest nodule measured 1.3 cm. The left kidney measured 4.5 cm. The right kidney revealed age related changes with slight, heterogenous cortical changes. This may be early metastatic change.

Spayed Female

**AGE**

15 years

**Adrenal Glands**

**INTERPRETED BY**

The **adrenal glands** were unremarkable.

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DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

**Spleen**

The **spleen** was severely volume contracted in this patient.

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**HOSPITAL NAME**

**Liver**

The **liver** revealed variable, heterogenous, hypoechoic nodular changes with an overt 4.0 cm biliary cystic mass. This may be incidental. However, other nodular changes were noted in the liver, which may represent metastatic disease given the intestinal and renal pathology. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

Marsh AH

**REFERRING VET**

Dr. Milwicky

**INVOICE**

**Gastrointestinal**

92763

The **gastrointestinal tract** presented variable gastric and small intestinal thickening with an overt 6.0 x 3.0 cm irregular mass with disrupted architecture. Proliferative, undifferentiated tissue was noted and entered into the regional omentum.

**DATE**

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**Pancreas**

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.



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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.

**SPECIES**

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**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

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). A large amount of thoracic fat was noted in this patient. A trace amount of pericardial effusion was noted. This is non-cardiogenic and likely owing to metastatic disease.

**INTERPRETED BY**

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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	0.49	1.26	0.6	47	82
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	1.1	1.0	1.0				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 involving the intestines, omentum, kidneys and possibly liver. Likely cause of minor pericardial effusion.



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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Humane euthanasia should be considered in this patient or some palliative therapy with aggressive IV fluid support. Prednisolone therapy and broad spectrum antibiotics may provide temporary relief.

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Feline

**BREED**

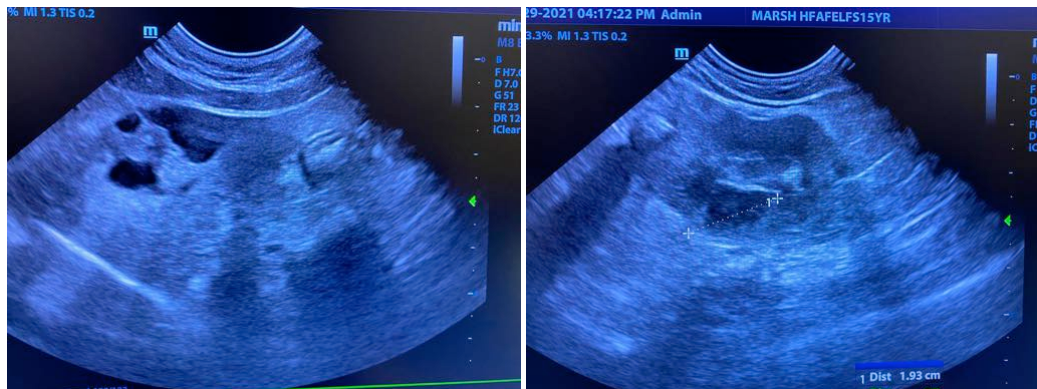
Russian Blule

**SEX**

Spayed Female

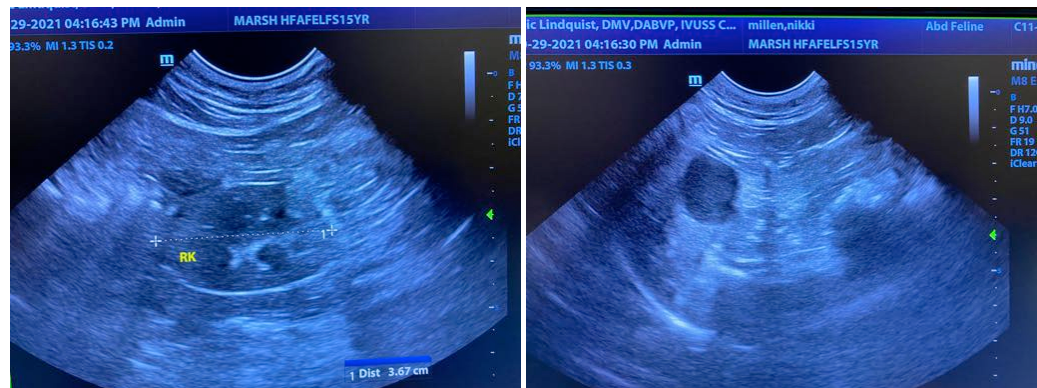
**AGE**

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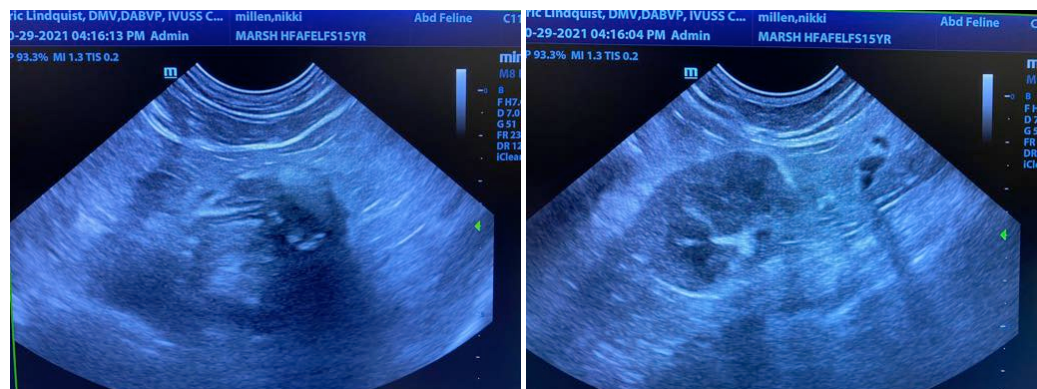


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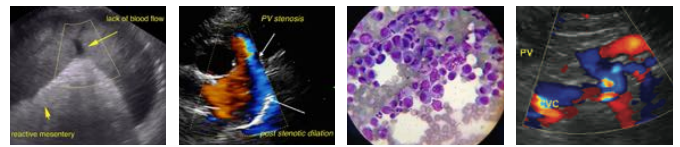
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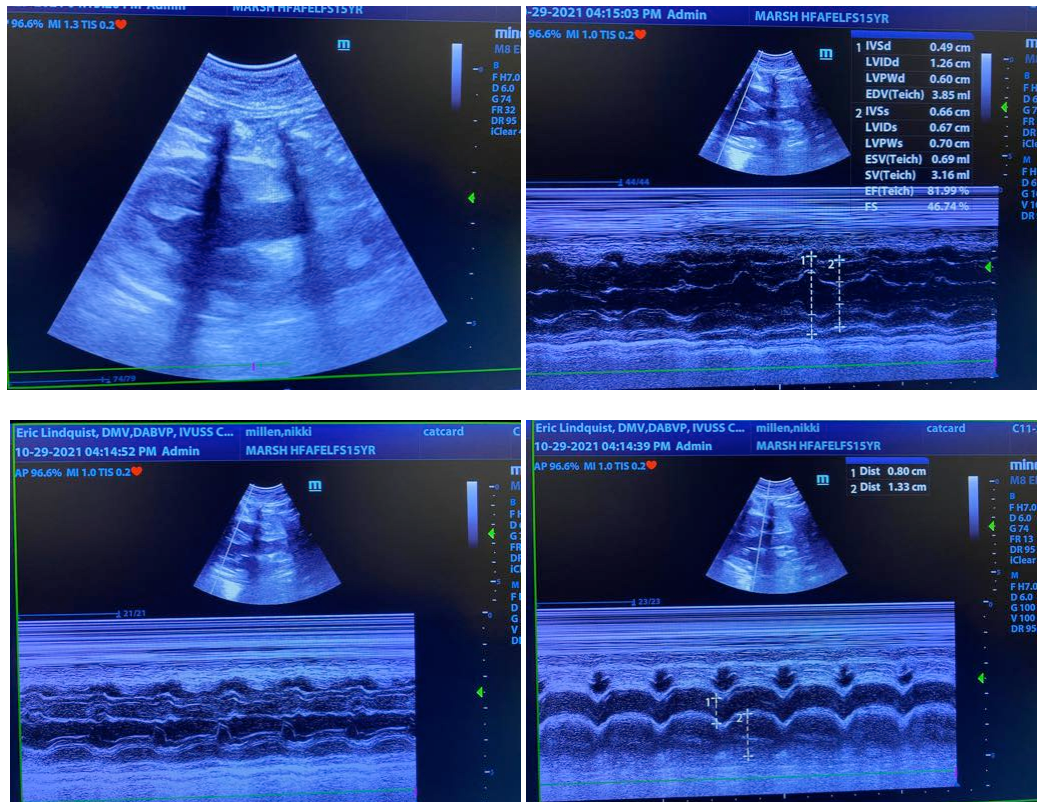
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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