



PATIENT PRESENTING CLINICAL SIGNS

Koa Mellen History: Splenic mass noted on radiographs obtained to evaluate for musculoskeletal pain last month following a fall. Koa also has a grade IV/VI left sided systolic heart murmur, no clinical signs of CHF
CBC, chemistry, T4 - Ca=13.3 (8.6-11.8) mg/dL, NSF otherwise

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED

Beagle

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.

SEX

Spayed female

AGE

13 years

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 left kidney measured 5.17 cm. The right kidney measured 4.6 cm.

WEIGHT

31.2 lbs

Adrenal Glands

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

The left **adrenal gland** was mildly enlarged and measured 1.0 cm in maximum width. The left adrenal gland revealed invasive phrenic vein invasion. This is strongly suggestive for carcinoma, pheochromocytoma. The right adrenal gland measured 0.73 cm at the cranial pole and 0.4 cm at the caudal pole.

IMAGING PERFORMED BY

Dr. Green

Spleen

The **spleen** revealed an isoechoic, 3.12 cm mass at the cranial pole. The splenic mass revealed focal mineralization. There was no evidence of rupture.

HOSPITAL NAME

Healing Spirit

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. 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.

REFERRING VET

Dr. Green

INVOICE

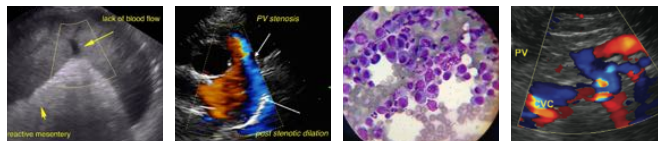
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Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine

DATE

6/13/23



PATIENT

demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Koa Mellen

SPECIES

Pancreas

Canine

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.

BREED

Beagle

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

SEX

Spayed female

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable insufficiency. 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 or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology. 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. No echographically detectable evidence of infiltrative disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window. Occasional arrhythmogenic activity was noted in this patient.

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WEIGHT

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CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base;)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			1.15		45		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			0.8	31.2 lbs	4.1	3.1	



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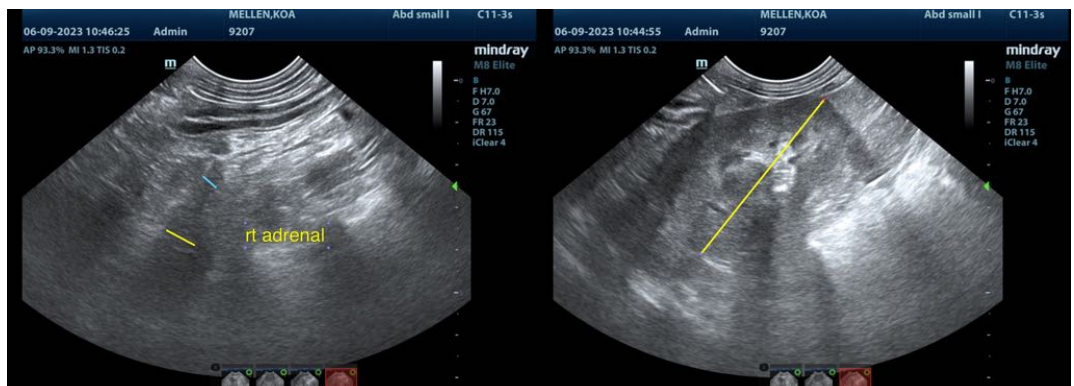
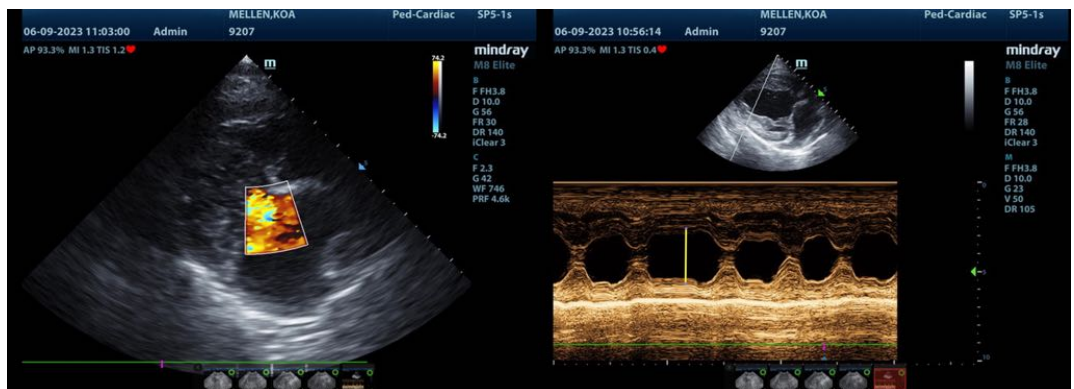
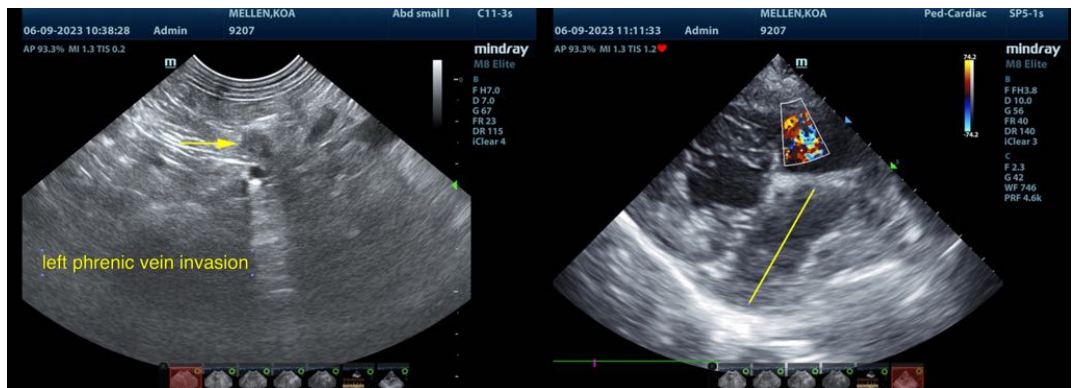
ULTRASONOGRAPHIC FINDINGS

Stage B1 valvular disease.

Invasive left adrenal gland.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

EKG is indicated in this patient. Pheochromocytoma versus carcinoma. If chest radiographs are free of evident pathology then splenectomy and left adrenalectomy are recommended.





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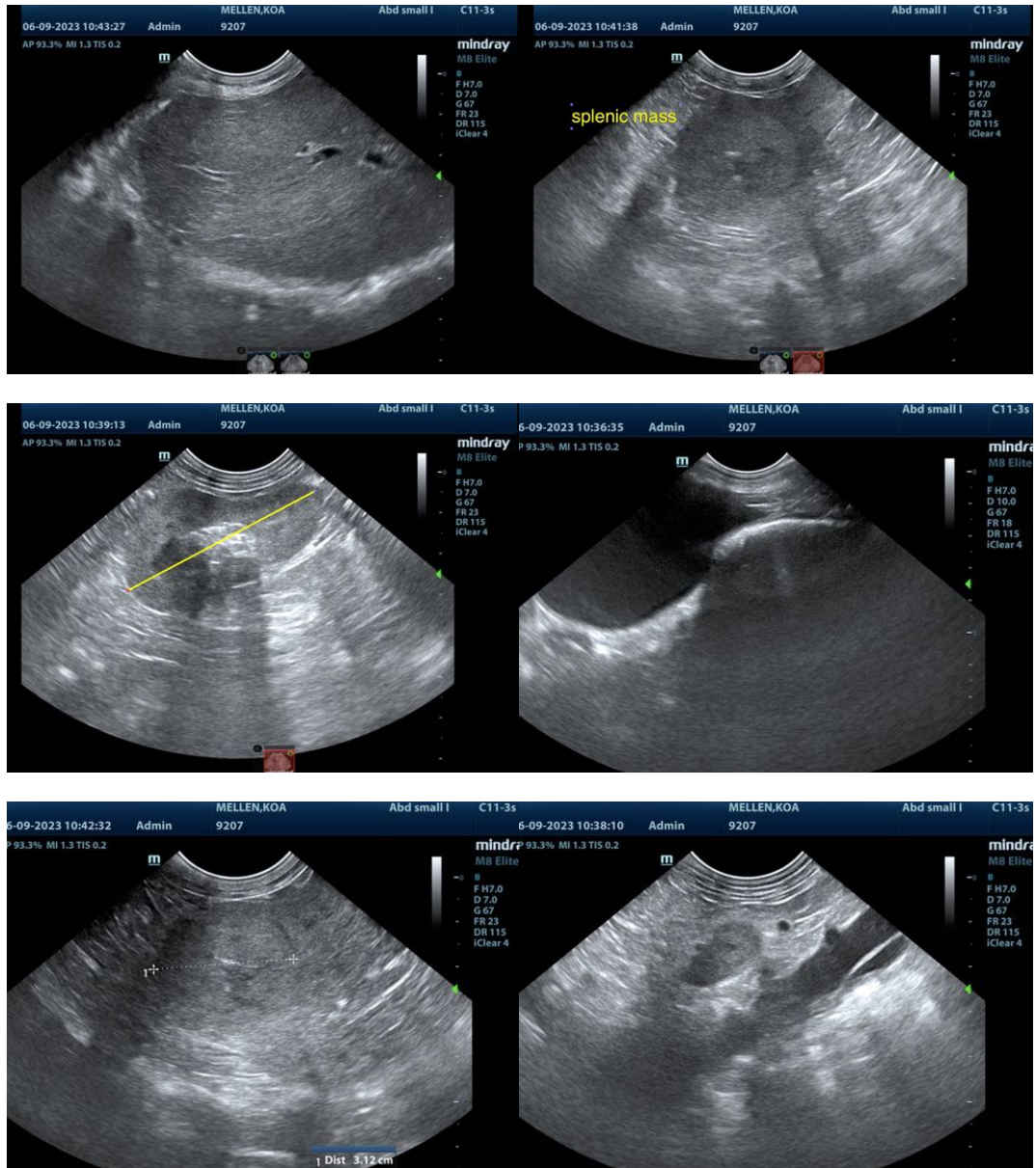
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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