

## PATIENT

Charlie Gregersen

## SPECIES

Canine

## BREED

Belgian Malinois

## SEX

SF

## AGE

11 years

## WEIGHT

71.4 lbs.

## INTERPRETED BY

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

## IMAGING PERFORMED BY

Sara Hansen

## PRESENTING CLINICAL SIGNS

EENT: MM light pink, moist. CRT 2 seconds. LS OU, Clean AU. Nares free of any discharge. ORAL: Moderate tartar and gingivitis present. Degraded 10-109 region. Suspect this area is cause of oral pain. INTEGUMENT: No external parasites observed. No evidence of skin disease at this time. LYMPH NODES: Lymph nodes are small and of normal texture CIRCULATORY: No murmur or arrhythmia ausculted. Femoral pulses are strong and synchronous. RESPIRATORY: Eupneic. Lungs clear bilaterally. No cough on tracheal palpation. DIGESTIVE: Very large non-compressible mass in abdomen. GENITOURINARY: No significant findings. MUSCULOSKELETAL: Ambulatory x all 4. NEURO: No neurologic deficits noted at this time. OTHER: Abnormal PE/Chem/CBC/UA Results: Current Medications CBD supplements and Incurin

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
PATIENT	--	--	1.3	1.25	38.1	71.7	0.32
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				
PATIENT	107	1.2	0.85	--	4.4	4.2	--

## HOSPITAL NAME

The Ark VC

## REFERRING VET

Dr. Sangl

## INVOICE

16101

## DATE

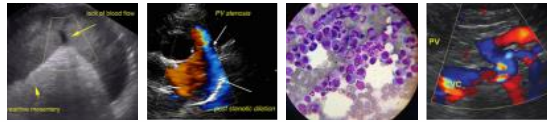
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### Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. 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. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. The **right ventricle** was of normal size (1/3 diameter of LV), chordae



<b>PATIENT</b>	structure, myocardial echogenicity and thickness. <b>Pulmonary outflow</b> tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). No visible <b>pericardial</b> or free pleura fluid was noted. The cranial <b>mediastinum and pericardial and extra-cardiac regions</b> were free of masses in the visible window.
Charlie Gregersen	
<b>SPECIES</b>	<b>Urinary System</b>
Canine	The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.
<b>BREED</b>	
Belgian Malinois	
<b>SEX</b>	Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 6.9 cm in length. The right kidney measured 6.5 cm in length.
SF	
<b>AGE</b>	<b>Adrenal Glands</b>
11 years	The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 3.4 cm in length x 0.70 cm width at the caudal pole. The right adrenal gland measured 2.5 cm in length x 0.67 cm width at the caudal pole.
<b>WEIGHT</b>	
71.4 lbs.	
<b>INTERPRETED BY</b>	<b>Spleen</b>
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	A large nonhomogeneous to diffusely cystic appearing mass, appearing to rise from the spleen, measuring at least 16.0 cm in diameter, was noted. The areas of the spleen, not involved with the mass, exhibited finely textured homogeneous parenchyma and maintained symmetrical capsule contour. Subtle evidence of reactive mesentery was noted around the mass with mild volume peritoneal free fluid, primarily in the caudal abdomen.
<b>IMAGING PERFORMED BY</b>	<b>Liver/ Gallbladder</b>
Sara Hansen	The liver exhibited potential for mild enlargement. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. No hepatic masses or nodules noted.
<b>HOSPITAL NAME</b>	The gallbladder was non-distended in size with primarily anechoic luminal content. The cystic and common bile ducts were normal.
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<b>REFERRING VET</b>	<b>Gastrointestinal</b>
Dr. Sangl	The stomach and small intestine were indistinctly visualized owing to the size of the splenic mass yet without overt evidence of pathology.
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**PATIENT**

**Pancreas**

Charlie Gregersen

The pancreas was not definitively visualized owing to increased omental artifact in the presence of the large splenic mass. No overt evidence of pancreatic pathology.

**SPECIES**

Canine

**Free Abdomen**

No overt lymphadenopathy was present. \* See Spleen section.

**BREED**

Belgian Malinois

**ULTRASONOGRAPHIC FINDINGS**

**SEX**

SF

**AGE**

11 years

- Normal echocardiogram
- Large cystic appearing splenic mass
- Mild chronic renal changes
- Mild volume peritoneal free fluid

**WEIGHT**

71.4 lbs.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The splenic mass is nonspecific with considerations including hyperplasia, hematopoiesis, granuloma, splenitis, or neoplasia (sarcoma, round cell neoplasia, other). Overt evidence of definitive major organ intraabdominal or pericardial metastasis was not obvious. The mild volume peritoneal free fluid may suggest secondary hemoabdomen. The possibility of non-sonographically evident or micrometastasis cannot be definitively excluded in these cases.

**INTERPRETED BY**

R. McKenzie Daniel,  
DVM, DABVP  
(Canine and Feline)

Assuming no evidence of thoracic pathology on three-view chest radiographs, laparotomy with expectation towards splenectomy, gross inspection of the liver and perisplenic omentum, is warranted. Full CBC/Chemistry panel and urinalysis is recommended prior to surgery.

**IMAGING PERFORMED BY**

Sara Hansen

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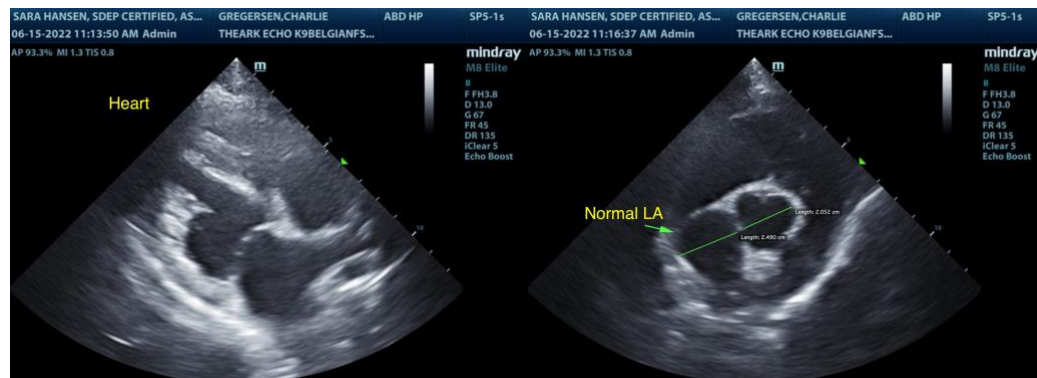
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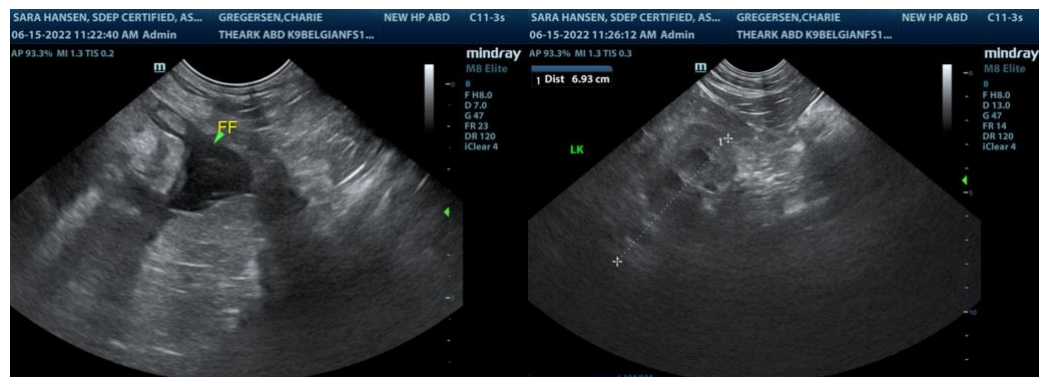
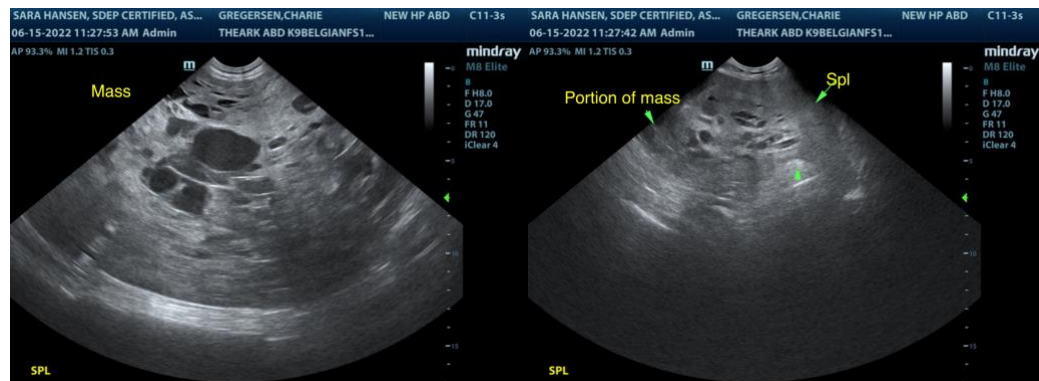
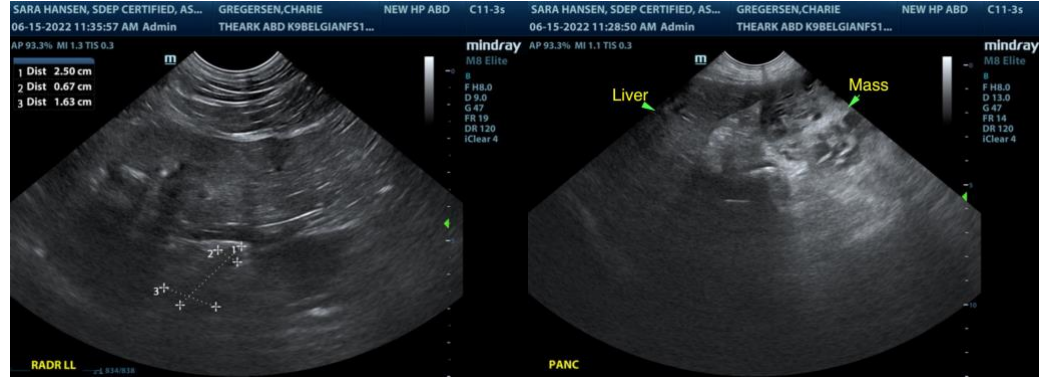
Dr. Sangl

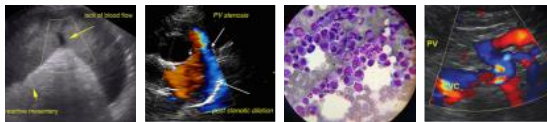
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**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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.

**R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)**  
**info@SonoPath.com**