



## PATIENT

Violet Rochford

## SPECIES

Canine

## BREED

Leonberger

## SEX

Spayed Female

## AGE

9

## WEIGHT

102

## INTERPRETED BY

Eric Lindquist, DMV,  
DABVP (CFM), Cert.  
IVUSS

## IMAGING PERFORMED BY

Jenn

## HOSPITAL NAME

Rockaway Animal  
Hospital

## REFERRING VET

Dr. Schiess

## INVOICE

72154

## DATE

11/27/25

## PRESENTING CLINICAL SIGNS

2 weeks of V/D xrays show regenerative anemia and ascites Tapped abd and got blood  
Abnormal PE/Chem/CBC/UA Results: HCT 40% Retics 404K PLT 142 BUN 6 remainder WNL

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT	--	--	1.0	1.3	30	--	0.1
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	LAD LA MAX 4 Chamber	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	80	1.0	1.29	102	4.01	4.1	--

### 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 structure, myocardial echogenicity and thickness. **Pulmonary outflow** tract assessment revealed normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio).

### 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 were noted. Ureteral papillae were normal.



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The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The left kidney measured 8.84 cm. The right kidney measured 8.6 cm.

### **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 left measured 2.94 cm x 0.95 cm at the cranial pole and 0.80 cm at the caudal pole. The right adrenal gland measured 1.0 cm at the cranial pole and 0.50 cm at the caudal pole.

### **Spleen**

The **spleen** presented slight irregular contour and was folded upon itself cranially. Parenchyma was uniform.

### **Liver**

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. 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.

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

### **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.

### **Free Abdomen**

Free fluid noted in the abdomen.

Pleural effusion also noted through the diaphragm.

### **ULTRASONOGRAPHIC FINDINGS**

- Dual cavity effusion, structurally normal viscera.
- Slightly irregular, folded spleen.
- Age related hepatic changes.



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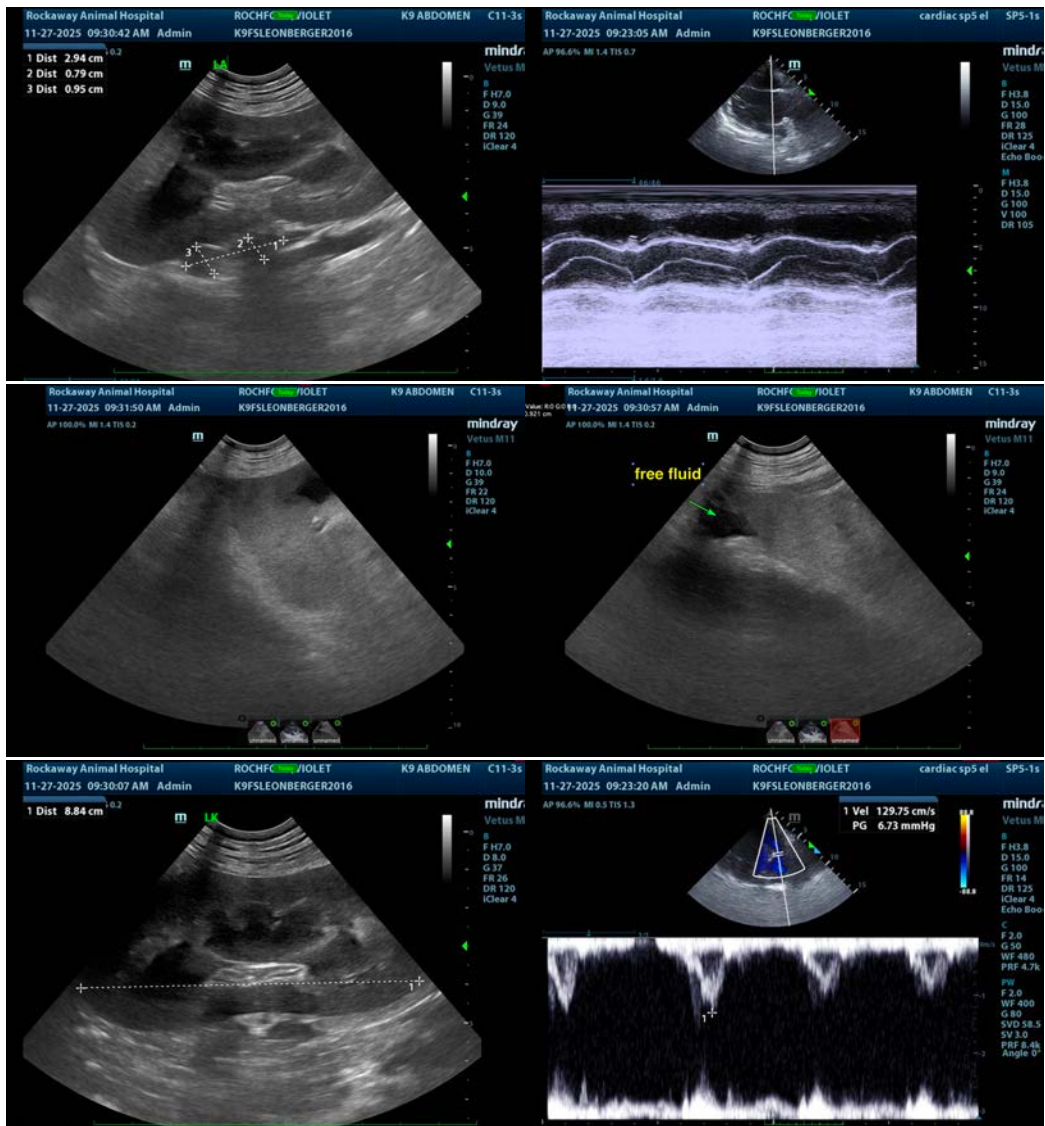
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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Structurally unremarkable heart and abdomen. The exact cause of the effusion is unclear. Ultrasound guided abdominocentesis and pleurocentesis with cytospin indicated for further definition. Underlying coagulopathy should be considered. Chest and abdominal CT may be the best option if the cause of hemorrhage is unclear, given the dual cavity fluid. Sampling of both cavities is essential for the next step, yet viscerally the organs appear normal for this age and breed. Mast cell disease is also a potential in this patient, yet diagnosis is otherwise open.





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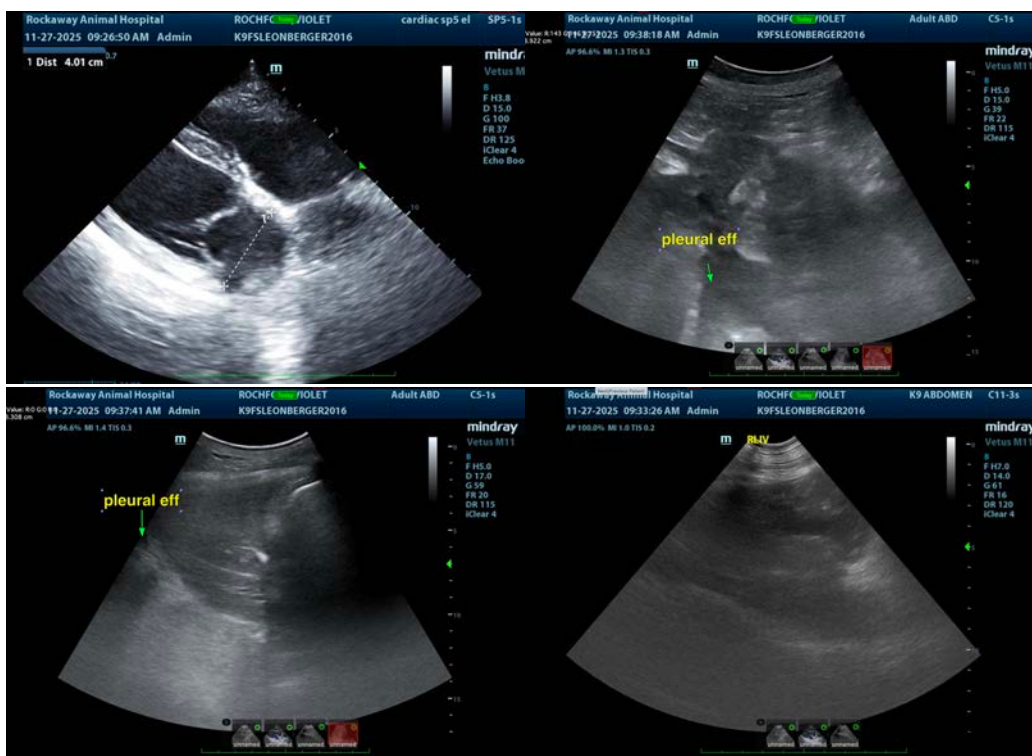
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP(CFM), Cert. IVUSS,  
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