



## PATIENT

The submitted study contained 19 videos and two still images of the spleen only.

Apollo Rivera

## PRESENTING CLINICAL SIGNS

Presented to rDVM and ER on 4/9/16 for acute lethargy, fever, hyporexia, diarrhea, vomiting.

## SPECIES

Canine

Abdominal ultrasound at that time indicated splenic vein thrombosis and parenchymal changes consistent with infarcts. Scant free fluid adjacent to spleen . Large heterogenous liver. Discussed differential considerations including residual effects of an acute hypersensitivity or anaphylactic-type event versus evolving chronic disease causing hypercoagulability and hypercalcemia. Hospitalized with IV fluids, cerenia, clopidogrel. Presented here on 5/12 for splenectomy consult; decided to wait. Presented today for ultrasound of spleen to look for evidence of changes.

## BREED

Malamute Mix

## SEX

Abnormal PE/Chem/CBC/UA Results: Hypoalbuminemia, hypercalcemia, elevated ionized calcium. eosinophilia . Increased ALP FNA of spleen, lymphoid hyperplasia and EMH. FNA of liver; moderate non-lipid vacuolar hepatopathy with evidence of cholestasis.

MN

## LIMITED ULTRASONOGRAPHIC EXAMINATION OF THE SPLEEN

## AGE

### Spleen

10yr

The spleen was overall normal in size with asymmetrical lateral and medial capsule contour and generalized heterogeneous indistinctly nodular splenic parenchyma with two well demarcated mildly expansive cranial and caudal hypoechoic splenic nodules. An example of a splenic nodule measured 1.3 - 1.4 cm in diameter.

## WEIGHT

79.2

Color Doppler assessment of the splenic hilus revealed subjective adequate splenic vascularity. No visible evidence of splenic vein or splenic hilus thrombosis.

## INTERPRETED BY

## ULTRASONOGRAPHIC FINDINGS

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

### Primary

- Asymmetrical non-homogenous nodular spleen – hyperplasia, hematopoiesis, inflammation, acute infarction, neoplasia all potentials.

## IMAGING PERFORMED BY

Carter

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

## HOSPITAL NAME

Willamette Veterinary  
Hospital

Correlation with previous splenic ultrasound presentation is recommended. Assuming normal clotting status using 25ga needle, recheck splenic parenchyma and splenic nodule FNA cytology could be considered. If not done, 3 view chest radiographs, rectal palpation and assessment of PTH-PTHrP level in conjunction with hypercalcemia could be considered. Serial sonographic monitoring of the spleen for evidence of progressive changes vs diagnostic and prophylactic splenectomy is suggested.

## REFERRING VET

Carter

## INVOICE

24883

## DATE

05/20/2026



**PATIENT**

Apollo Rivera

**SPECIES**

Canine

**BREED**

Malamute Mix

**SEX**

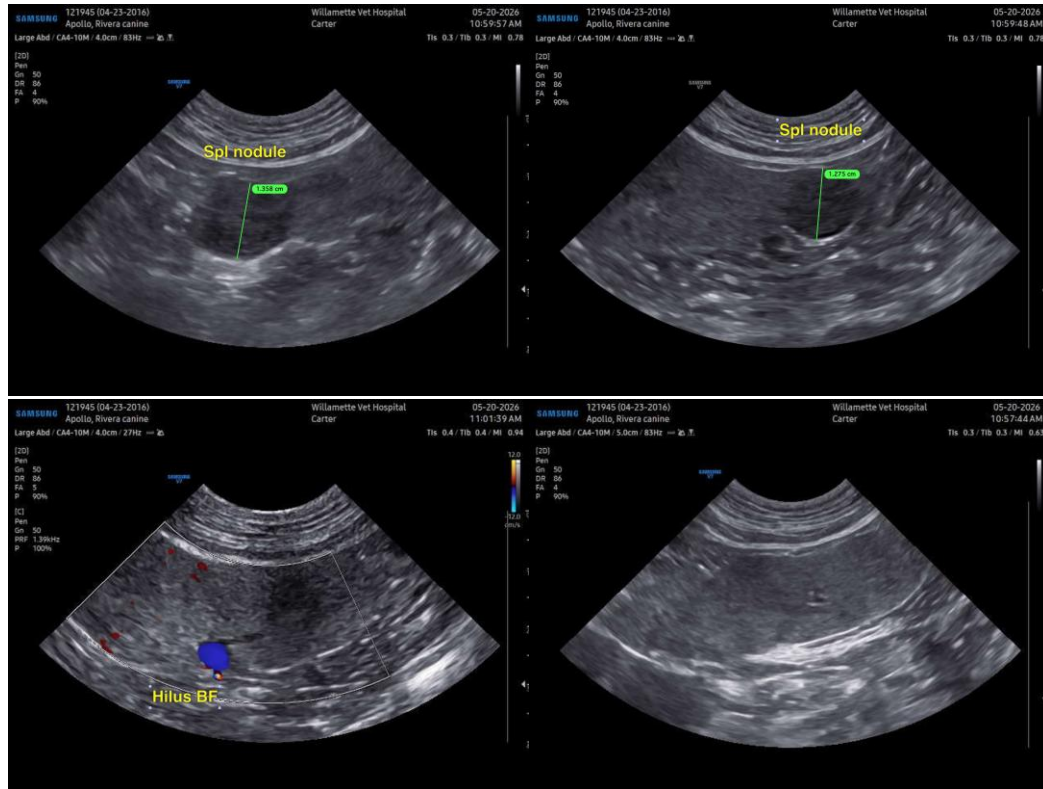
MN

**AGE**

10yr

**WEIGHT**

79.2



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.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Carter

**HOSPITAL NAME**

Willamette Veterinary  
Hospital

**REFERRING VET**

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R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)  
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