



## PATIENT

Piper Rangel

## SPECIES

Canine

## BREED

Walker Hound

## SEX

FS

## AGE

8Y, 8M

## WEIGHT

75.6lbs

## INTERPRETED BY

Beth Johnson, DVM,  
DACVIM (SAIM)

## IMAGING PERFORMED BY

Lucas Budden

## HOSPITAL NAME

Frontier Veterinary  
Hospital

## REFERRING VET

Lucas Budden

## INVOICE

73376

## DATE

1-19-26

## PRESENTING CLINICAL SIGNS

History:

- Clinical signs:
- Recent MCT diagnosis. Ultrasound as met check. MCT is on the medial right stifle measuring 35x45mm. Growing and shrinking per owner.
- Current medications:
- Benadryl
- Butorphanol/Dexdomitor to facilitate ultrasound

Abnormal PE/Chem/CBC/UA Results: Physical exam: MCT on medial right stifle. 2 other smaller masses nearby: 1 diagnosed as a keratin containing lesion and the other sampled today. No peripheral LN enlargement. Normal exam otherwise. Lab work: CBC/chem/PT/PTT 1/19/26 ALP high 587 remainder of cbc/chem/pt/ptt normal Liver FNA pending FNA of 3rd dermal mass near MCT pending Chest rads showed no evidence of metastasis

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The urinary bladder is adequately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal is size (6.72 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

The left kidney is normal is size (7.31 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

### Adrenal Glands

The left adrenal gland is normal in size (0.41 cm at cranial pole and 0.45 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

The right adrenal gland is normal in size (0.41 cm at caudal pole; cranial pole is unable to be well visualized in these images), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

### Spleen

The spleen is subjectively normal in size (1.5 cm thick at the hilus) with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.



**PATIENT**

**Liver**

Piper Rangel

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is mildly heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion. Additionally, an approximately 0.4 cm diameter anechoic density/cyst mid liver.

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Canine

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

**BREED**

Walker Hound

**Gastrointestinal**

**SEX**

FS

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is mildly distended with a small to moderate amount of echogenic non-shadowing luminal contents and gas consistent with normal ingesta. There is no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

**AGE**

8Y, 8M

The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is mildly distended with echogenic non-shadowing luminal contents and gas consistent with normal ingesta/chyme. There is no evidence of obstruction, foreign material or infiltrative disease.

**WEIGHT**

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The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

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**Pancreas**

Beth Johnson, DVM,  
DACVIM (SAIM)

The pancreas that is observed appears appropriately isoechoic to surrounding omental fat. Visible capsule is smooth and normal in contour. Visible pancreatic parenchyma is homogenous and unremarkable. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

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**Free Abdomen**

There is no visible free peritoneal effusion noted in these images.

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There is no apparent pathologic lymphadenopathy noted in these images.

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**ULTRASONOGRAPHIC FINDINGS**

- Mildly Heterogenous Liver with a suspect incidental benign hepatic cyst- These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**INVOICE**

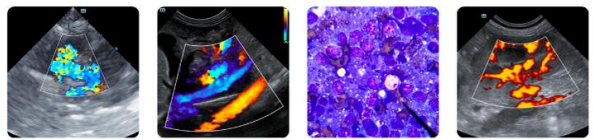
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There is no definitive ultrasonographically visible evidence of intraabdominal metastatic disease in these images at this time. However, microscopic disease cannot be definitively ruled out. As is reportedly already pending, given patient's reported laboratory changes, FNA of the liver, +/- spleen can be considered if patient's coagulation status is appropriate.

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Three view thoracic radiographs are recommended for further assessment of cardio-pulmonary status as well as to further evaluate for any evidence of metastatic disease, if not recently evaluated.



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Consultation with a veterinary oncologist could be considered.

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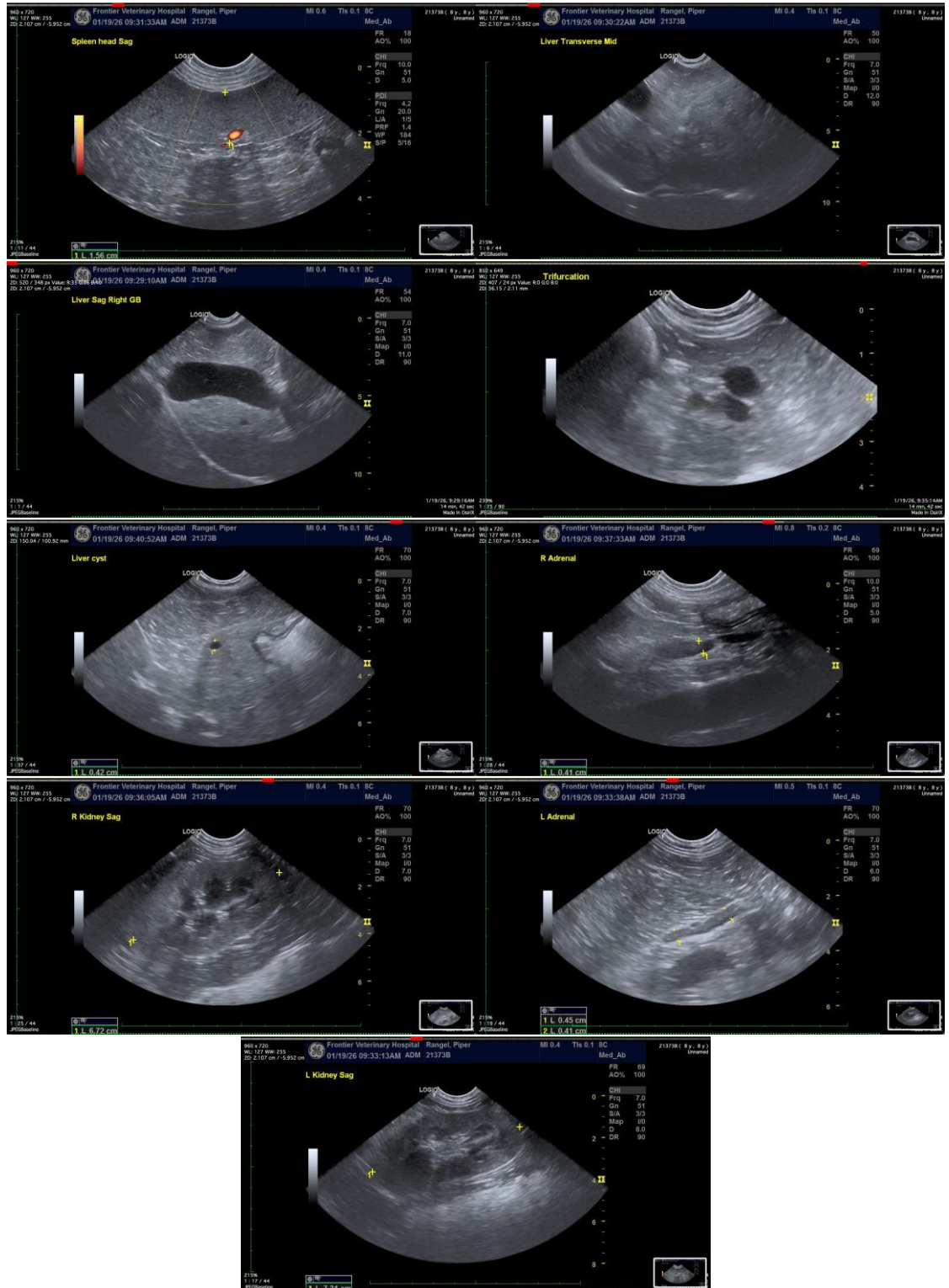
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Beth Johnson, DVM, DACVIM**  
info@sonopath.com