
PATIENT PRESENTING CLINICAL SIGNS

Ashley Han

History: Patient of local animal hospital. History of mammary masses - both chains (spayed at 5 years old). Recent fleeting lameness right hind 1 month earlier left front limb. On Carprofen/Gabapentin. Presented to RDVM on 3/22 for lameness - blood work performed - mild anemia and est. decreased plts. (some clumping) - not sure if lameness related to mammary masses +/- bld issues. Current meds: Carprofen, Gabapentin, Animax for ear infection.

SPECIES

Canine

BREED

Shih Tzu

Abnormal PE/Chem/CBC/UA Results: 3/23: Superchem= 231 Alk. Phos. all else normal. CBC: HCT 32, NRBC 28, T4= < 0.5, polychromasia slight, PLTs 45 = est. decreased few small clumps noted.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Urinary System
SEX

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.

Female Spayed

AGE

13 years

Kidneys are overall normal in size and shape (Left 3.64 cm / Right 4.54 cm). with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed.

WEIGHT

13.14 lbs

Adrenal Glands

Adrenal glands are plump/swollen in size with a hyperechoic nodule noted in the cranial pole of the left adrenal gland (1.69 cm in length) (cranial 0.86 cm) (caudal 0.74 cm). The right adrenal gland: (1.72 cm in length) (cranial 1.00 cm) (caudal 0.70 cm). Nodule does not disrupt normal shape and/or architecture.

INTERPRETED BY

 Beth Johnson, DVM
 DACVIM

Spleen

Spleen is subjectively large in size with a swollen and scalloped/undulating capsular contour. Multifocal coalescing nodules are noted throughout the parenchyma. Splenic vasculature appears normal. Enhanced hyperechoic surrounding fat is noted.

IMAGING PERFORMED BY

Kelly Vazquez

Liver

Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.

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 VH

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.

REFERRING VET

Dr. Hartwick

Gastrointestinal

The visible stomach wall is normal in thickness and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

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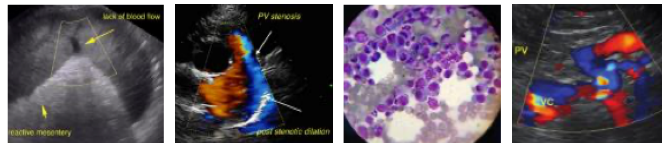
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The visible small intestines are normal in wall thickness and layering. Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

DATE

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The visible colon is normal in wall thickness and layering. Contents are consistent with normal formed feces and gas.


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Pancreas

The observed pancreas 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.

SPECIES

Canine

Free Abdomen

There is no evidence of peritoneal effusion. Medial iliac lymph nodes are enlarged with swollen irregular capsular contour and loss of normal length to width ratio (rounded in shape). Nodes are hypoechoic with loss of normal parenchymal detail.

BREED

Shih Tzu

Other

There is no evidence of heart base or pericardial pathology noted in these images at this time. If cardiac function evaluation is desired a full echocardiogram is recommended.

SEX

Female Spayed

ULTRASONOGRAPHIC FINDINGS
Primary Findings
AGE

13 years

- Honeycomb Spleen – This finding is strongly suggestive of infiltrative disease such as round cell neoplasia. Benign disease cannot be ruled out but is considered less likely.
- Heterogenous liver - 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.
- Cranial pole left adrenal gland– A hyperechoic nodule is noted in the X pole. Nodule does not disrupt normal shape and/or architecture.

WEIGHT

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Secondary Findings

- Age-related kidney changes

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
HOSPITAL NAME

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- Given the patient's history, the appearance of the spleen, as well as potentially the lymph nodes, is most concerning for likely metastatic disease versus other infiltrative neoplasia. Benign changes, including extramedullary hematopoiesis in the spleen, given the patient's reported anemia and thrombocytopenia, however, can't be definitively ruled out without tissue sampling. Recommendations include:
 1. 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.
 2. Confirmation of whether or not the thrombocytopenia is real via a manual platelet count is recommended, because a fine-needle aspirate of the spleen and enlarged lymph nodes should be considered (if coagulation status is appropriate/safe to proceed.)
- These findings however, have an unknown, if any relation to the presenting complaint of lameness and further evaluation of concurrent orthopedic and/or neurologic disease +/- other metastatic disease lesions affecting the bones, etc., should be evaluated. Consultation with a veterinary oncologist may be helpful.

REFERRING VET

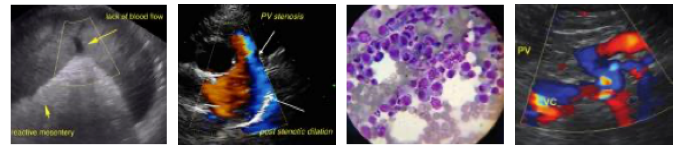
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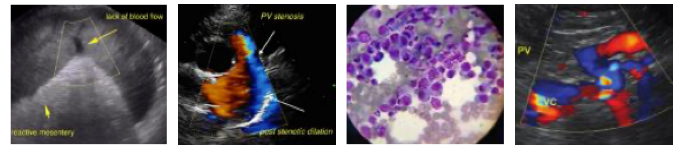
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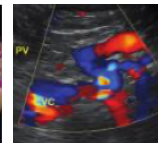
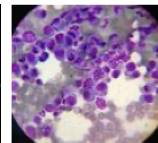
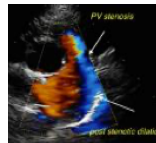
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The information and recommendations provided are based on the images presented by the referring



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veterinarian. 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.

SPECIES

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Beth Johnson, DVM DACVIM

Beth.Johnson@SonoPath.com

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SEX

Female Spayed

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WEIGHT

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