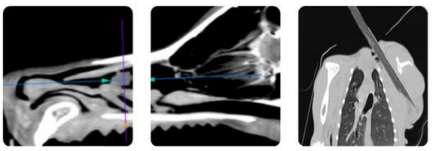


SonoPath FOSTERING THE ART OF VETERINARY MEDICINE™ www.thefocalzone.com info@thefocalzone.com 289.808.2608

PATIENT
Max Perger

SPECIES
Canine

BREED
Shih Tzu

SEX
MN

AGE
18Y

WEIGHT
6KG

INTERPRETED BY
Beth Johnson, DVM, DACVIM (SAIM)

IMAGING PERFORMED BY
Amanda Stewart

HOSPITAL NAME
Westoak AH

REFERRING VET
Kohlmaier

INVOICE
74092

DATE
3-9-26

PRESENTING CLINICAL SIGNS

- Grade 2 /6 holosystolic murmur PMI L AV and Grade 3/6 holosystolic murmur PMI R AV
- Liver disease

Abnormal PE/Chem/CBC/UA Results: See attached Primary Question to Be Answered in This Exam Repeat echocardiogram and investigate his liver disease/chronic renal disease

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder is only mildly distended. Visible contents are anechoic. Urinary bladder wall is unable to be fully assessed for pathology without further distension. No visible masses or definitive cystoliths are observed. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface. In the face of urinary signs and/or suspected urinary bladder pathology, reassessment after complete filling is recommended.

Prostate is normal in size, echotexture and echogenicity for a neutered male.

Kidneys are bilaterally normal in size (left 4.07 cm & right 4.15 cm), irregular and diffusely echogenic with decreased corticomedullary distinction and poor visualization of internal architecture. There is no pyelectasia noted and no mineral is observed.

Adrenal Glands

Left adrenal gland is normal in size (0.52 cm at cranial pole and 0.63 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (1.0 cm at cranial pole and 0.59 cm at caudal pole), shape and overall architecture, echogenicity and echotexture. Visible surrounding vasculature appears normal.

Spleen

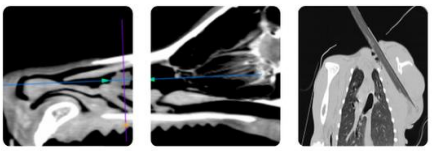
Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). An approximately 0.7 cm in diameter, discrete, homogeneous, iso- to slightly hypo-echoic, expansive, non destructing nodule of the medial aspect of the spleen is noted. Splenic vasculature appears normal.

Liver

Near the mid to left caudal aspect of the liver is an approximately 4.3 x 4.6 cm mixed partially cystic slightly hyperechoic mass. The remaining liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.

Gastrointestinal



SonoPath FOSTERING THE ART OF VETERINARY MEDICINE™ www.thefocalzone.com info@thefocalzone.com 289.808.2608

PATIENT

Max Perger

SPECIES

Canine

BREED

Shih Tzu

SEX

MN

AGE

18Y

WEIGHT

6KG

INTERPRETED BY

Beth Johnson, DVM, DACVIM (SAIM)

IMAGING PERFORMED BY

Amanda Stewart

HOSPITAL NAME

Westoak AH

REFERRING VET

Kohlmaier

INVOICE

74092

DATE

3-9-26

The stomach is mildly thick in some views measuring 1.0-1.2 cm thick with normal intact layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

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.

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

Pancreas

Pancreas is prominent (enlarged) in size and mildly irregular in shape with a slightly undulating contour. Parenchyma is coarse in echotexture and heterogenous to hypoechoic in echogenicity.

Free Abdomen

There is a mild amount of anechoic free fluid adjacent to the liver mass.

There is no apparent pathologic lymphadenopathy noted in these images.

ULTRASONOGRAPHIC FINDINGS

- The liver mass could represent infiltrative malignant neoplasia including hepatocellular carcinoma, sarcoma, round cell neoplasia, other, or a benign process such as hepatoma/ adenoma, chronic inflammatory lesion. Even significant nodular hyperplasia, extramedullary hematopoiesis, and other cannot be ruled out without tissue sampling.
- The mildly thick gastric wall trends in appearance toward benign as is seen with mild gastritis or potentially even in a normal patient variant/rugal fold although early or emerging infiltrative neoplasia cannot be ruled out without tissue sampling.
- Concurrent chronic low grade smoldering pancreatitis cannot be ruled out and should be suspected in the face of appropriate clinical signs.
- Mild Free Fluid: Free fluid is of unknown origin. Differentials (unless already ruled out) could include increased hydrostatic pressure (cardiac disease and/or vascular or lymph blockage), decreased oncotic pressure (low albumin), vasculitis, paraneoplastic fluid, rupture/ leakage of/from an organ (GI, GB, UB, other), blood (hemoabdomen), other.
- Hypoechoic splenic nodule – likely represents a benign lesion such as a cyst, hematoma, nodular hyperplasia, extramedullary hematopoiesis, etc., however while considered less likely, infiltrative neoplasia can mimic benign lesions and cannot be ruled out.
- Mild to moderate bilateral chronic kidney disease changes.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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.

FNA of the liver mass +/- the splenic nodule +/- the gastric wall could be considered if patient's

PATIENT

Max Perger

SPECIES

Canine

BREED

Shih Tzu

SEX

MN

AGE

18Y

WEIGHT

6KG

INTERPRETED BY

Beth Johnson, DVM, DACVIM (SAIM)

IMAGING PERFORMED BY

Amanda Stewart

HOSPITAL NAME

Westoak AH

REFERRING VET

Kohlmaier

INVOICE

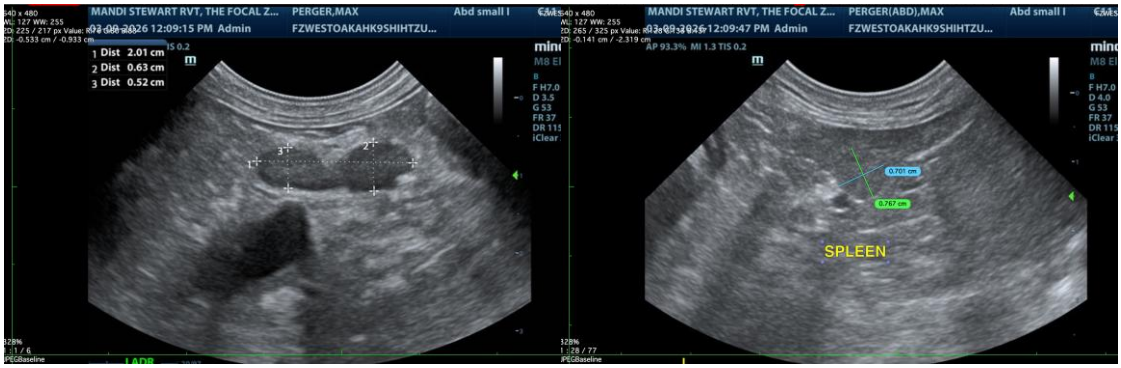
74092

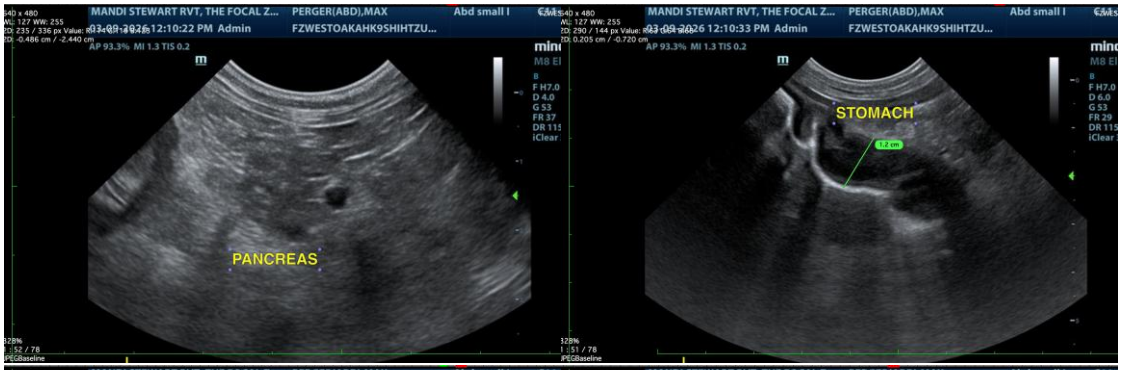
DATE

3-9-26

coagulation status is appropriate.

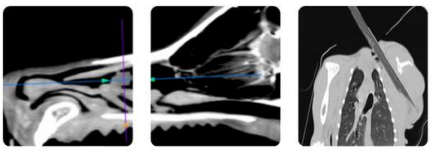
Additional recommendations including treatment and further diagnostic are largely dependent on results of above, patient's full clinical history, etc.





The Focal Zone
FUELED BY SONOPATH VETERINARY ULTRASOUND

SonoPath FOSTERING THE ART OF VETERINARY MEDICINE™ www.thefocalzone.com info@thefocalzone.com 289.808.2608



Teleradiology
Educational Teleconsultation Services™

PATIENT

Max Perger

SPECIES

Canine

BREED

Shih Tzu

SEX

MN

AGE

18Y

WEIGHT

6KG

INTERPRETED BY

Beth Johnson, DVM, DACVIM (SAIM)

IMAGING PERFORMED BY

Amanda Stewart

HOSPITAL NAME

Westoak AH

REFERRING VET

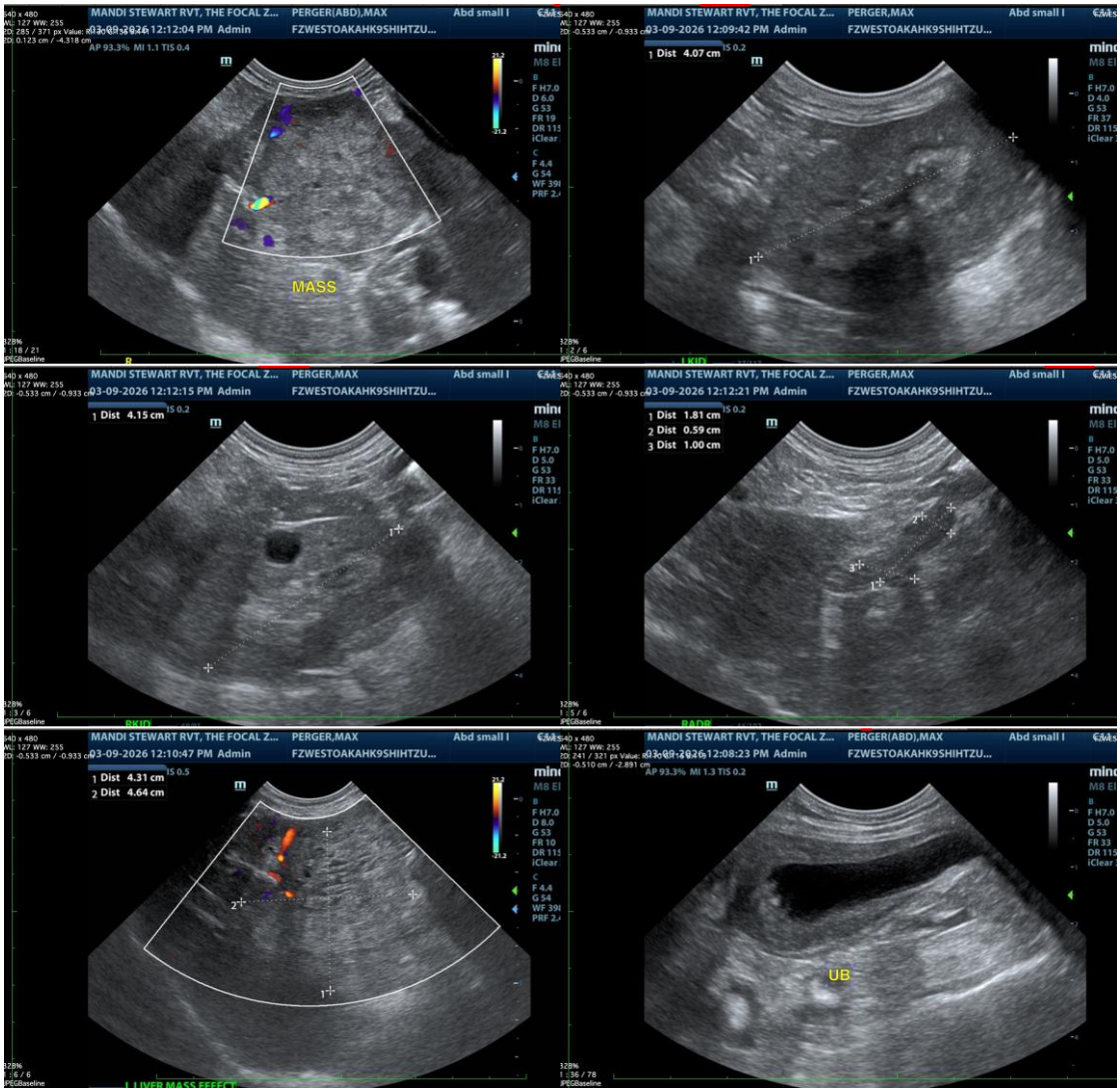
Kohlmaier

INVOICE

74092

DATE

3-9-26



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