

PATIENT PRESENTING CLINICAL SIGNS

PATIENT Oliver Zenz
SPECIES Canine
BREED Labradoodle
SEX Neutered Male
AGE 5/22/12
WEIGHT 27 kg

Mild elevation in liver values last 6 months. Had AUS 2/2/2023 at Mountain View. This will be follow up study to monitor for changes/progression of hyperechoic regions in spleen, nodules of mixed echogenicity in liver, cystic structure left kidney and moderate gallbladder debris. MEDS: Denamarin advanced chews, Dasuquin Advanced soft chews, Heartgard and Nexgard monthly,

Abnormal PE/Chem/CBC/UA Results: most recent labs were March 2: ALT/ALP wnl, lepto Antibody positive (but has been vaccinated), lepto PCR negative on urine and blood, paired bile acids: pre : 15.6, post: 4.3

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The prostate is normal in size (0.87 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (6.32 cm) with a large cortical cyst measuring 1.46 cm (previous measurement 2/20/23 was 1.31 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (5.58 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.67 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.76 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

Spleen

The spleen is subjectively normal in size and the echotexture is homogenous. The splenic capsule is smooth with no visible irregularities. Rare discrete focal hyperechoic, perivascular parenchymal abnormalities are present. The appearance of these lesions is most consistent with benign splenic myelolipomas. The blood flow through the hilus and splenic parenchyma appears normal.

INTERPRETED BY

Kathleen Sennello DVM,
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Medicine)

IMAGING PERFORMED BY

Loetitia Saint-Jacques,
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HOSPITAL NAME

Aspen Animal Wellness
Center

REFERRING VET

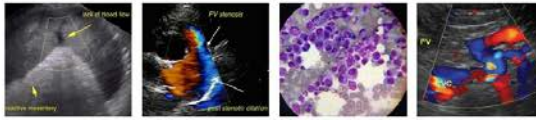
Dr. Betsy Phillips

INVOICE

46983

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4/27/23



PATIENT *Liver*

Oliver Zenz

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The liver is large in size and irregular. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There are numerous nodules/mass lesions visualized associated with the liver. The majority of these appear stable from the previous scan. There is a mixed echogenic subcostal nodule measuring 1.38 cm x 2.99 cm, an isoechoic nodule on the right measuring 2.1 cm x 2.06 cm, and a lesion in the right caudate lobe measuring 3.02 cm x 2.52 cm. Additionally, there is a large hypoechoic nodule/mass effect visualized in the right intracostal view that appears to deviate the hepatic margins and is surrounded by hyperechoic mesentery. This lesion measures 2.07 cm x 2.45 cm and appears new or progressed from a previous lesion.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measures 0.50 cm. Jejunum wall measures 0.42 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

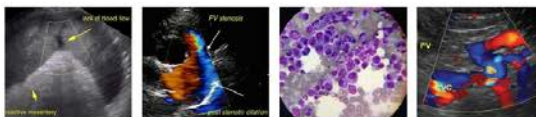
The area of the pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. The sublumbar lymph node is visible but normal at 0.49 cm. The omentum is hyperechoic around the hepatic mass visualized in the right intracostal view.

PRIMARY FINDINGS

- Stable hyperechoic lesions visualized in the spleen – these are most consistent with benign myelolipomas.
- Numerous hypo- and mixed echogenic nodules/mass effects in the liver – most of these have minimal criteria for malignancy and appear relatively stable.
- New/progressed hypoechoic nodule visualized in the right intracostal view – this lesion appears to be prominent and is deviating the hepatic margins with surrounding hyperechoic mesentery.


PATIENT

Oliver Zenz

This appears hepatic in origin, but an overlapping pancreatic or GI mass effect cannot be definitively excluded.

SPECIES

Canine

SECONDARY FINDINGS

- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.
- Stable cystic structure in the left kidney – most consistent with a benign renal cyst.

BREED

Labradoodle

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
SEX

Neutered Male

Most of the lesions observed in the left kidney, spleen, and liver appear relatively stable over the last 10-12 weeks. There is a prominent hypoechoic nodule/mass effect visualized in the right intracostal view, which appears either to be a previously visualized nodule that has progressed, or a new lesion. This has surrounding hyperechoic mesentery and some criteria for malignancy. Options moving forward would include a fine needle aspirate if a safe window can be obtained for the procedure (I suspect this may be challenging, as it is primarily viewed intracostally) or advanced imaging (likely a contrast CT scan, as this is a faster procedure) to further evaluate all of the liver lesions, particularly the hypoechoic lesion visualized in the right intracostal view to try and determine if surgical removal/biopsy is recommended.

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Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

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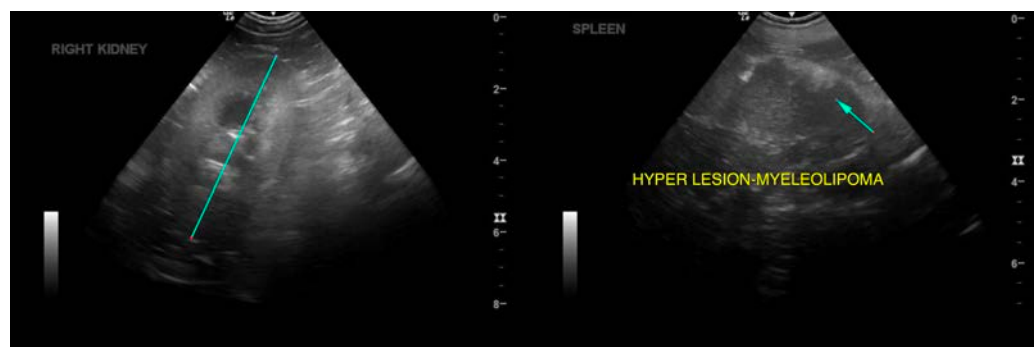
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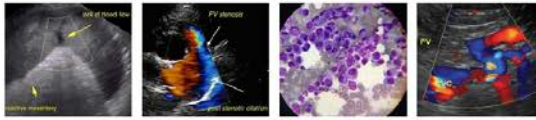
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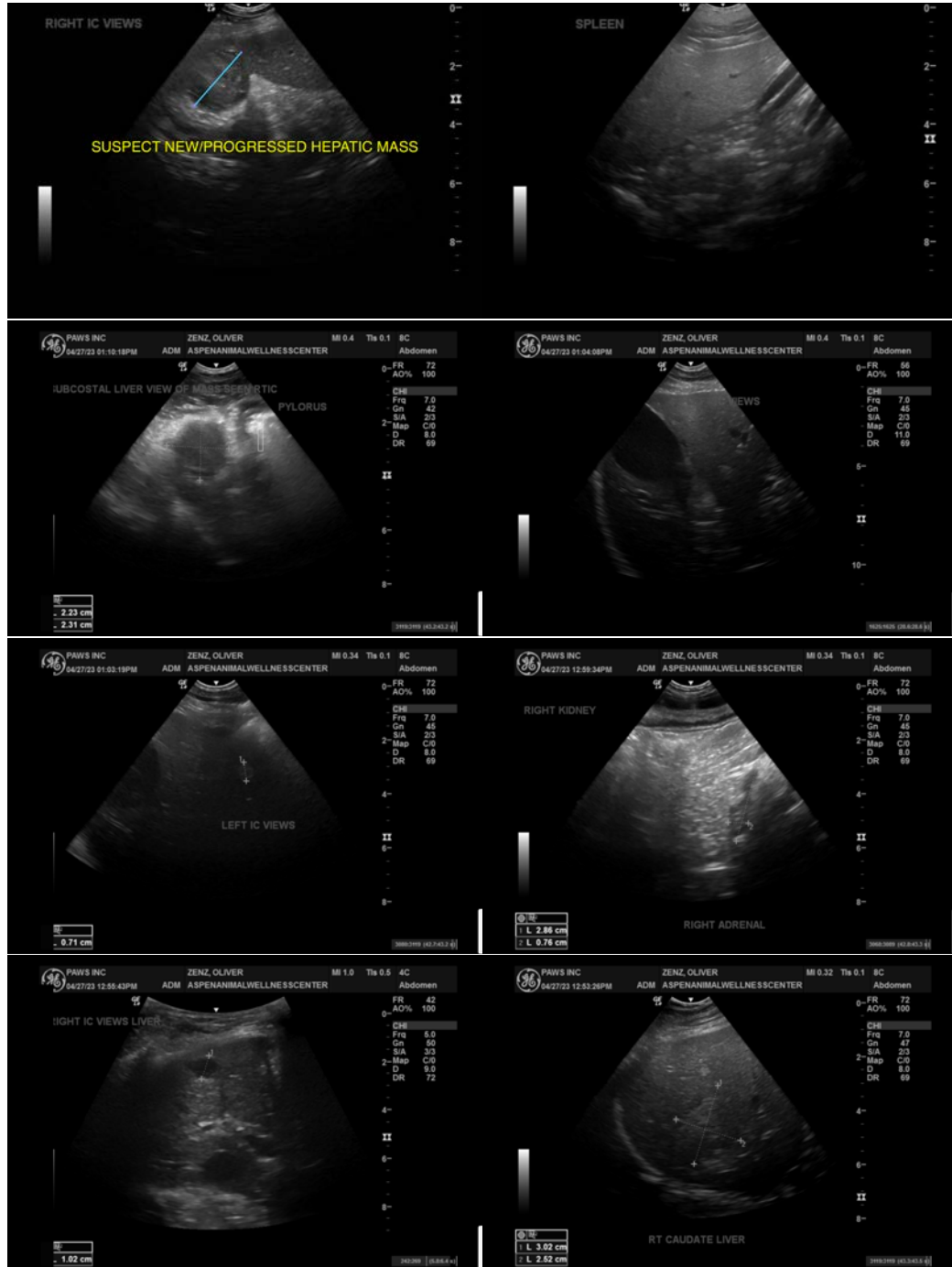
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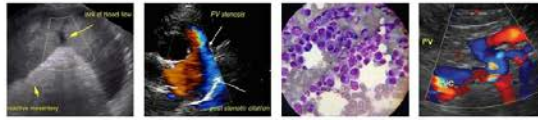
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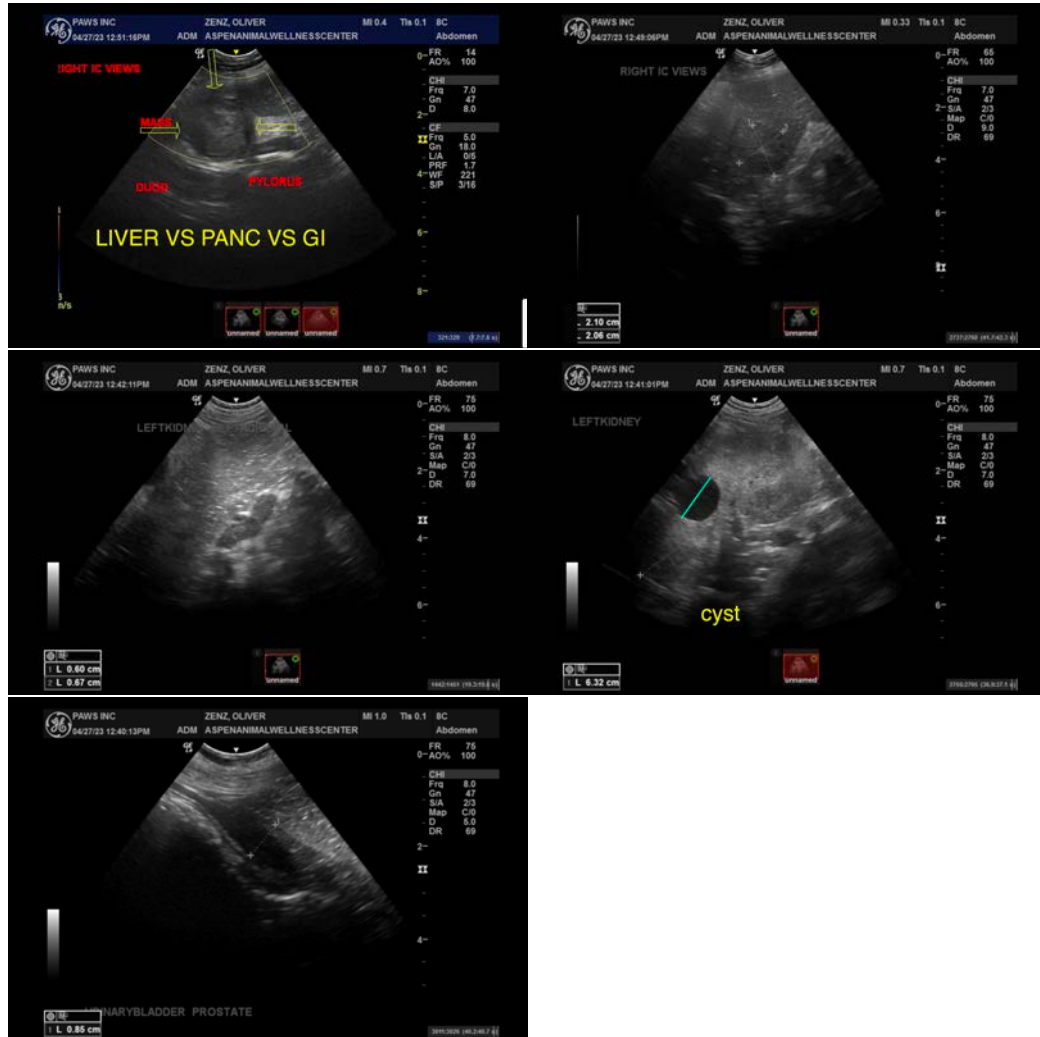
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)

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