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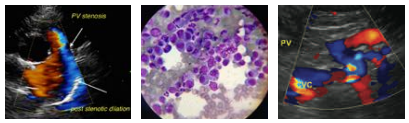

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**DATE**
9/22/21

**PATIENT**
Oakley Baber

**SPECIES**
Canine

**BREED**
Goldendoodle

**SEX**
Neutered male

**AGE**
2011

**WEIGHT**
76.4 lbs

**INTERPRETED BY**
Kathleen Sennello DVM, MS, Diplomate ACVIM (Small Animal Internal Medicine)

**HOSPITAL NAME**
Airpark AH

**REFERRING VET**
Dr. Owens

**INVOICE**
91926

## PRESENTING CLINICAL SIGNS

Mildly Elevated liver values on routine senior bloodwork 8/5/21. Rx 1 month amoxicillin and rechecked values 9/9/21, slightly higher values. Dog acting normally. Has had 2 GI foreign body surgeries- one with an R & A in 2014 and one with a gastrotomy and enterotomy with a lot of adhesions noted in 2020.
Current Medications: Amoxicillin 750 mg PO BID x 14 days after initial elevations in liver values.
Lab Results & Radiographs: will be emailed separately.
Date of Previous IntraPet Ultrasound: No previous
Sedation: not needed
Stat Report: not requested

## 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 (0.81 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 (7.81 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Occasional, pinpoint, non-obstructive nephroliths were noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (6.55 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. Occasional, pinpoint, non-obstructive nephroliths were noted. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

### *Adrenal Glands*

The left adrenal gland is normal in size measuring 0.75 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 0.74 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 heterogenous. The blood flow through the hilus and splenic parenchyma appears normal. Three small mass lesions are visualized. Two hypoechoic discrete nodules, one disrupts the capsule and measures 1.66 x 1.12 cm and 2.05 x 1.52 cm. The third mass/nodule has a target like appearance and disrupts the capsule measuring 1.33 x 1.24 cm.

### *Liver*

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is an ill-defined isoechoic mass effect that measures 3.16 x 1.94 cm with a

small midbody cystic region observed. The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are primarily anechoic. 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. The duodenum measured as normal (0.41 cm in wall thickness) and the jejunum measured as normal (0.74 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 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, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

### *Other*

No pericardial effusion was noted.

## ULTRASONOGRAPHIC FINDINGS

**PRIMARY FINDINGS:**

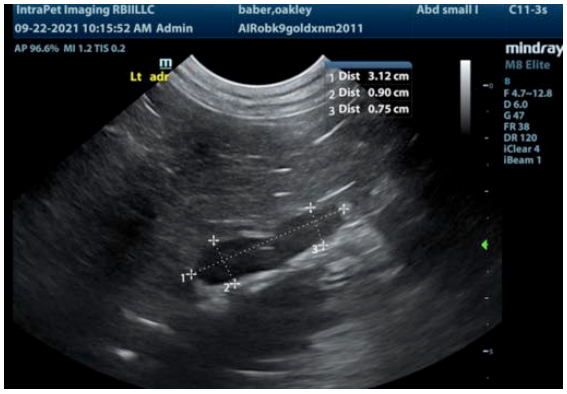
- Mottled spleen with three distinct mass lesions/nodules. The lesions are discrete and disrupt the capsule. My primary concern is neoplastic change. Other differentials include lymphoid hyperplasia, extramedullary hematopoiesis. Cytology or histopathology would be necessary to get a definitive diagnosis.

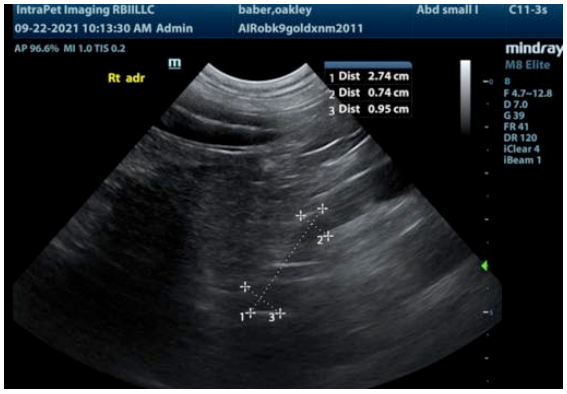
- Heterogenous liver with isoechoic mass effect. The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

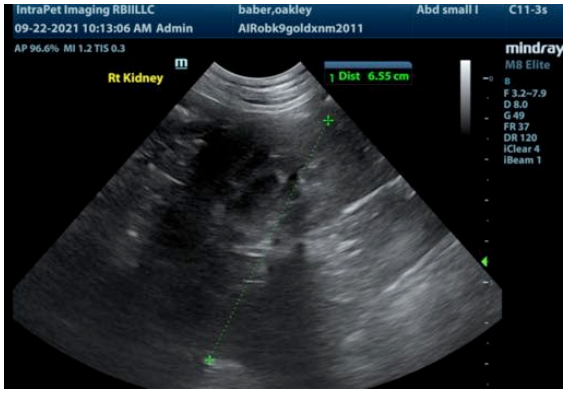
## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The lesions in the spleen are small, but concerning because there are multiple lesions and two of them disrupt the splenic capsule. Additionally there is abnormal tissue visualized in the liver. I recommend three view thoracic radiographs. Options moving forward include splenectomy for both diagnostic and therapeutic

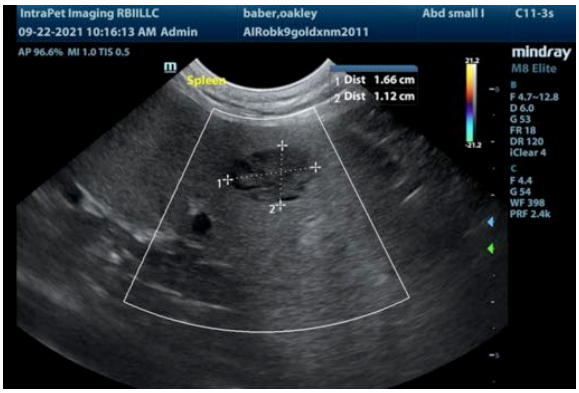
purposes combined with a liver biopsy. In an ideal situation advanced imaging (CT scan) would be considered to evaluate the liver lesion better prior to surgery and better evaluate for evidence of metastatic disease. Alternately a FNA of the liver and spleen can be considered although I think it would be difficult to reach all of these lesions. Additionally consider a liver function test as it may help with anesthetic planning.

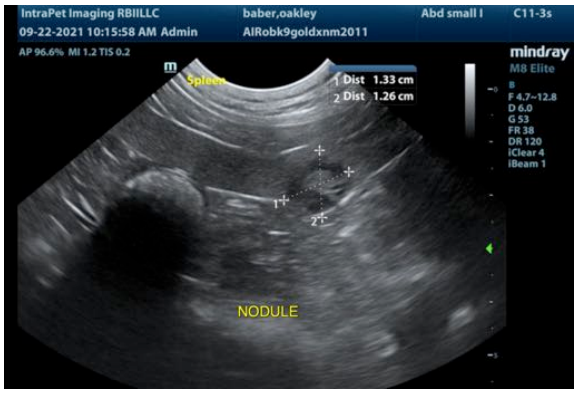


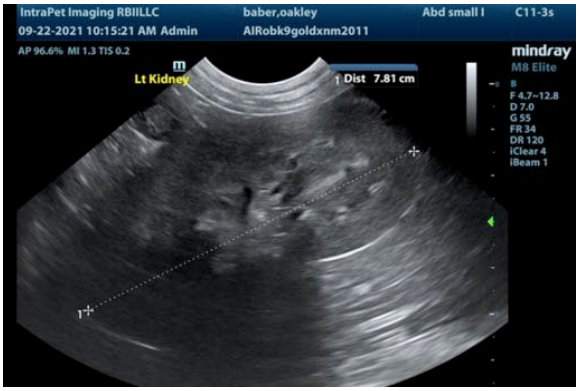



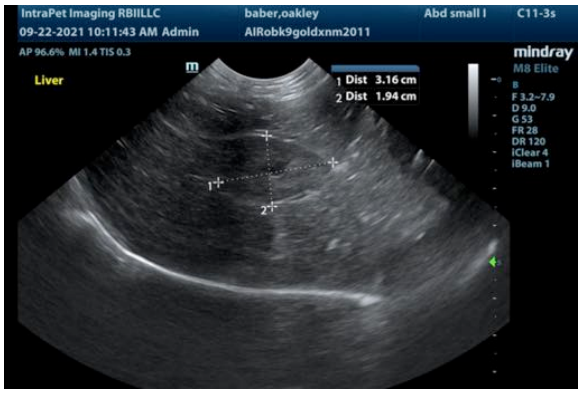











**The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

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.

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