



**PATIENT**

Bella Gibson

**SPECIES**

Canine

**BREED**

Chihuahua X

**SEX**

Spayed Female

**AGE**

4 Years 6 Months

**WEIGHT**

26 Pounds

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Ashley Whitesell

**HOSPITAL NAME**

Dickson Animal Clinic

**REFERRING VET**

Dr. Kristen Levine

**INVOICE**

45877

**DATE**

3/14/23

**PRESENTING CLINICAL SIGNS**

Not eating well, more lethargic over the weekend, does get a varied diet  
Abnormal PE/Chem/CBC/UA Results: Enlarged submandibular LN, appetite down, sublumbar In looked enlarged on x-ray,

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder is moderately 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 in size (5.1 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. A hyperechoic band parallel to the corticomedullary border is present.

The left kidney is normal in size (4.61 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. A hyperechoic band parallel to the corticomedullary border is present.

**Adrenal Glands**

The right adrenal gland is normal in size (0.58 cm at the cranial pole and 0.39 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (0.31 cm at the cranial pole and 0.42 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**Spleen**

The 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). No focal nodules or masses are observed. Splenic vasculature appears normal.

**Liver**

Liver is subjectively enlarged (swollen contour). Mild parenchymal remodeling with diffusely mildly coarse architecture and increased portal markings is present. No focal nodules or masses are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

Gallbladder is moderately distended with anechoic bile as well as mild 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**

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) 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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The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). 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.

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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.

**BREED**

**Pancreas**

Chihuahua X

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

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**Free Abdomen**

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There is no evidence of free peritoneal effusion noted in these images.

Sublumbar lymphadenopathy is noted with representative lymph nodes being elongated to slightly rounded in shape, hypoechoic in appearance, and measuring 0.67 cm thick.

**WEIGHT**

26 Pounds

**PRIMARY FINDINGS**

**INTERPRETED BY**

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DACVIM

- **Bilateral medullary rim sign** - This finding is of unknown clinical significance and can be a normal variant, often idiopathic. Medullary rim sign can be present with renal disease including FIP, lymphoma, hypercalcemic nephropathy, Leptospirosis, tubular disease, other and should be interpreted in combination with other more specific indications of kidney disease such as isosthenuria, proteinuria, azotemia, etc. This is a common incidental finding in patients with diabetes mellitus.
- **Hypoechoic hepatomegaly** - This appearance is consistent with an acute hepatopathy or acute cholangiohepatitis. Infiltrative neoplasia (round cell neoplasia) should also be considered.
- **Sublumbar lymphadenopathy** - Both infiltrative neoplasia as well as reactive lymph nodes are differentials and cannot be differentiated fully without tissue sampling.

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**SECONDARY FINDINGS**

- **Mild gallbladder debris** - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

If not recently evaluated, a general metabolic health screen is recommended, beginning with CBC/Chem panel, electrolytes, a urinalysis and, if indicated based on urinalysis results, urine culture. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

Fine needle aspirates of the peripherally enlarged lymph nodes +/- sublumbar lymph nodes (if they can safely be reached and if patient's coagulation status is appropriate), as well as possibly the liver could be considered to further evaluate for evidence of infiltrative round cell neoplasia such as lymphoma.



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Additionally, given the specific location of lymphadenopathy (submandibular and sublumbar) combined with decreased appetite, a thorough oral/dental exam and rectal perianal exams are recommended if not already evaluated.

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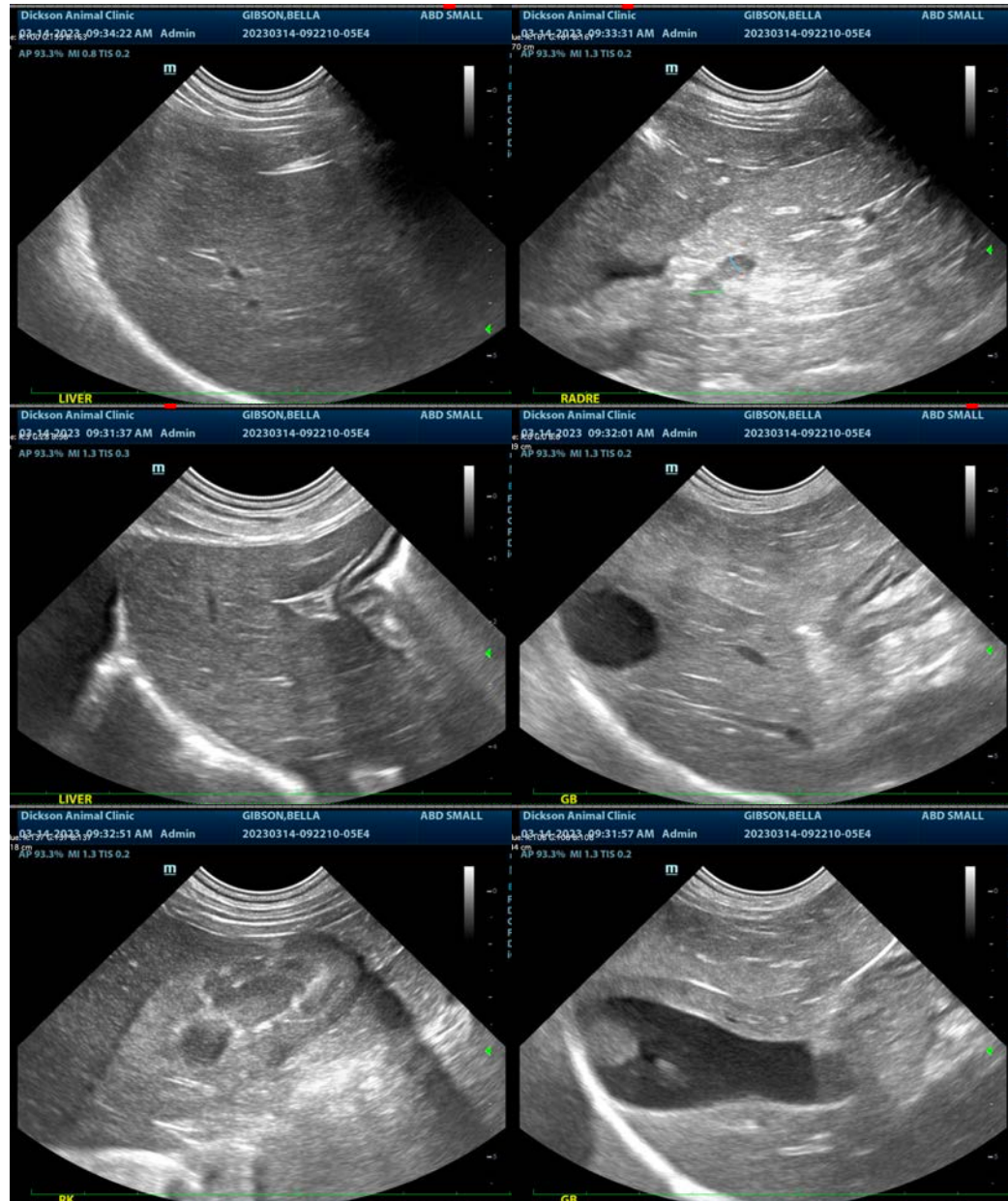
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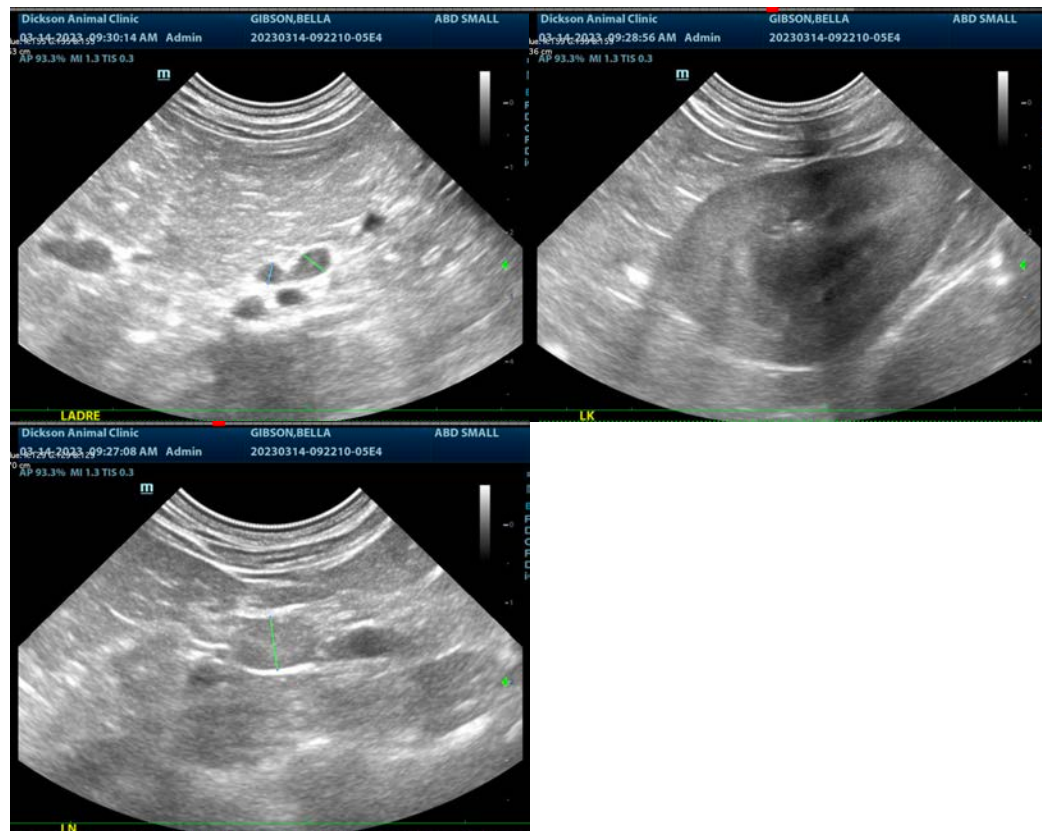
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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