

**DATE PRESENTING CLINICAL SIGNS**

8/9/22 Multiple rectal masses noted on exam June 25, 2022. Seen at ER for straining to defecate and increased drinking. P has a hx of elevated alkaline phosphase at ER visit and hypercalcemia from early May.

**PATIENT**

Maiya Miller Current Medications: None.  
Lab Results: Elevated alk phos, total calcium. Mild hypothyroidism vs euthyroid sick.  
Date of Previous IntraPet Ultrasound: No previous.

**SPECIES**

Canine Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****BREED**

Husky

**SEX**

Spayed Female

**AGE**

8/18/11

**WEIGHT**

53.8 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Andi Parkinson RDMS

**HOSPITAL NAME**

Fullerton AH

**REFERRING VET**

Dr. Levine

**INVOICE**

40260

**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 left kidney has a normal shape and size (5.93 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. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (5.52 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. 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 0.54 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 0.64 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, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**Liver**

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is mildly heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There is a small anechoic cyst visualized measuring 0.62 cm, and an ill-defined, hyperechoic nodule measuring 2.96 cm in diameter.

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 (between 0.3-0.5cm in wall thickness) and the jejunum measured as normal (between 0.2-0.47cm.) 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. There is what appears to be a significant caudal sublumbar lymphadenopathy with large mass effects that likely represent enlarged abnormal sublumbar lymph nodes measuring 1.7, 2.01 cm. Additionally, there is a larger, somewhat cystic appearing structure measuring 3.39 cm, and a very large mass effect measuring 4.51 cm x 7.43 cm that could be an intrapelvic mass or another lymph node. The omentum is hyperechoic in the caudal abdomen.

## **ULTRASONOGRAPHIC FINDINGS**

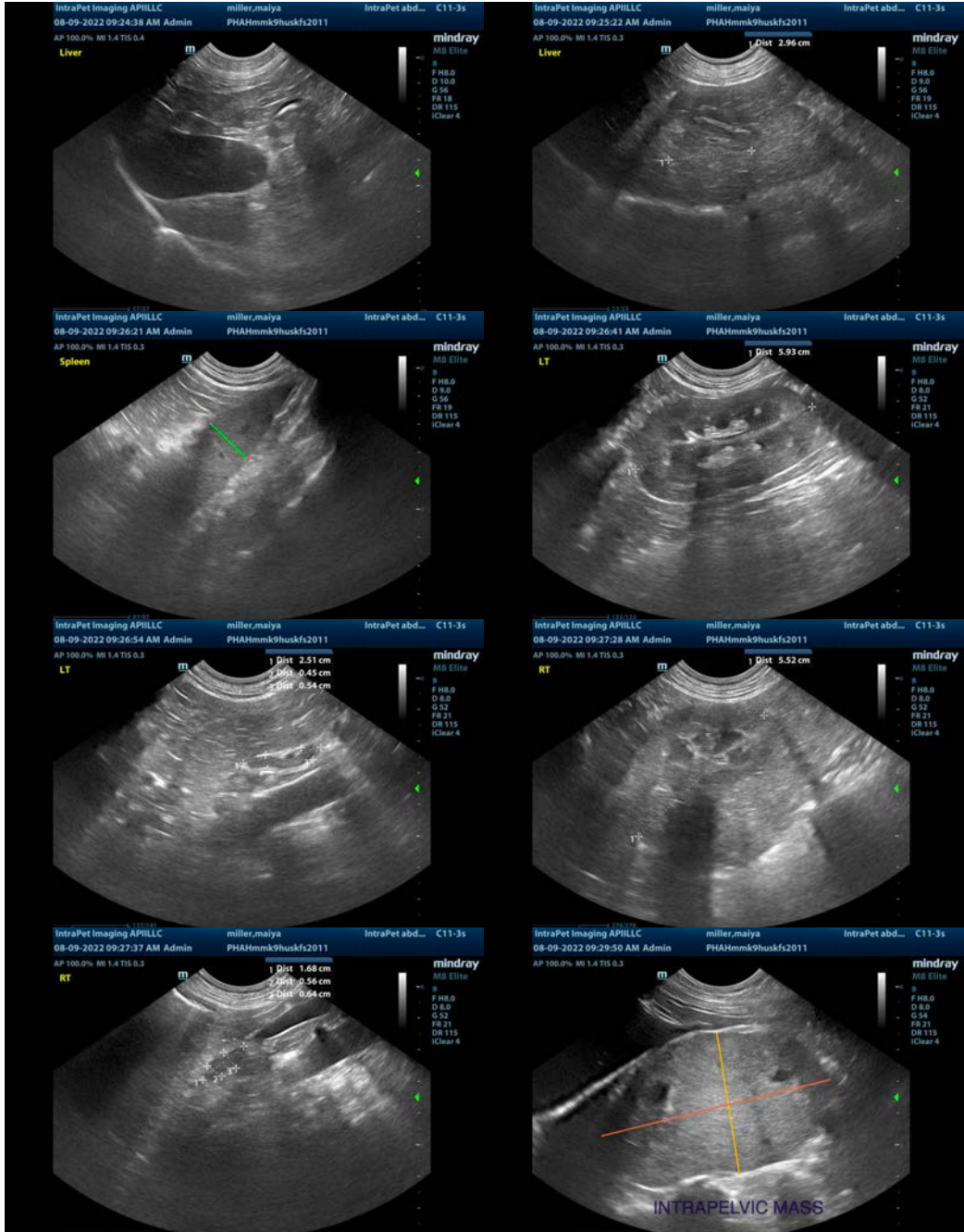
- Large intrapelvic mass effect and severe lymphadenopathy – These lesions likely represent a cluster of effaced, severely enlarged lymph nodes, or an intrapelvic mass and a sublumbar lymphadenopathy. Concern is high for possible metastatic neoplasia.
- Mildly heterogeneous liver with ill-defined hyperechoic nodule – 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. The appearance of this nodule trends towards a more benign process.

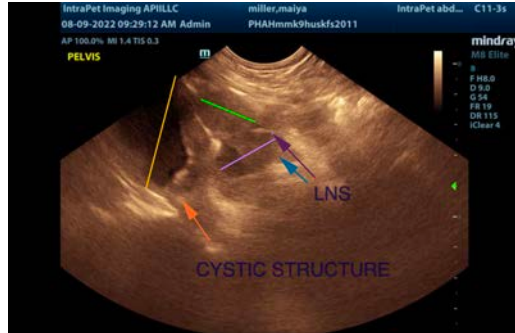
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

There is a large space occupying mass visualized in the intrapelvic region in addition to enlarged lymph nodes and a cystic structure that is possibly a cystic lymph node(?). This is very likely associated with the hypercalcemia reported. Consider a fine needle aspirate of the large intrapelvic mass with care to avoid large local vessels, in addition to a fine needle aspirate of the external masses described.

Additionally, consider abdominal and thoracic radiographs to look for metastasis to the lungs, sublumbar vertebrae, etc. Recommend a hypercalcemia of malignancy panel to the University of Michigan for a PTHrP, PTH, and ionized calcium level. Recommend stool softeners to aid with the constipation and possible consultation with a veterinary oncologist regarding treatment options and prognosis.

A caudal abdominal CT scan will likely be necessary to further delineate the intrapelvic masses, as the extent of these lesions is obscured due to shadowing from the pelvis, etc.





**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.

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