

**DATE PRESENTING CLINICAL SIGNS**

2/24/23

History: 2/14/2023 - Owner complaint of urination in the house. Exam WNL. NSF on UA. Evidence of a mass in pelvis canal with some mineralization. Hx - had ovariohysterectomy at a late age and has had benign mammary adenomas removed.

PATIENT

Lily Wolf

Current Medications: None.

Date of Previous IntraPet Ultrasound: No previous.

SPECIES

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

Imaging Performed By: Rachel Brillhart, RDMS.

BREED

Pug

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**SEX**

Spayed Female

Urinary System

The urinary bladder is moderately distended with anechoic urine. The bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2.0 cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

AGE

10/23/13

The left kidney has a normal shape and size (4.15 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.

WEIGHT

11.5 Pounds

The right kidney has a normal shape and size (3.73 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.

INTERPRETED BY

Kathleen Sennello DVM,
MS, Diplomate ACVIM
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Adrenal Glands

The left adrenal gland is normal in size measuring 0.79 cm at the cranial pole and 0.57 cm at the caudal pole x 1.93 cm in length. It is observed in its normal position cranial to the left renal artery. It is somewhat irregular in appearance in that there is a hyperechoic nodule in the cranial pole (0.77 cm x 0.65 cm). This does not significantly deviate the adrenal capsule and no evidence of vascular invasion is visualized.

HOSPITAL NAME

Hickory VH

The right adrenal gland is normal in size measuring 0.45 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.

REFERRING VET

Dr. Silcox

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.

INVOICE

21252

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

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 <0.7 cm 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 0.3-0.5 cm in wall thickness) and the jejunum measured as normal (0.27 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 prominent and mottled compared to the surrounding isoechoic 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

There is a large hypoechoic mineralized mass effect visualized dorsal to the urethra within the pelvis, measuring approximately 2.15 cm x 4.26 cm. Findings are suspicious for a uterine body mass.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Hyperechoic nodule in the cranial pole of the left adrenal gland. Adrenomegaly could be consistent with neoplasia (e.g., adenoma, carcinoma, pheochromocytoma), hyperplasia, inflammation, other.
- Hypoechoic mineralized intrapelvic mass effect. Findings are most consistent with a uterine body mass, although other possibilities exist. This could represent a benign or neoplastic lesion (carcinoma, fibrosarcoma, leiomyoma, leiomyosarcoma, granuloma, etc.).

Secondary Findings

- Prominent mottled pancreas. The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

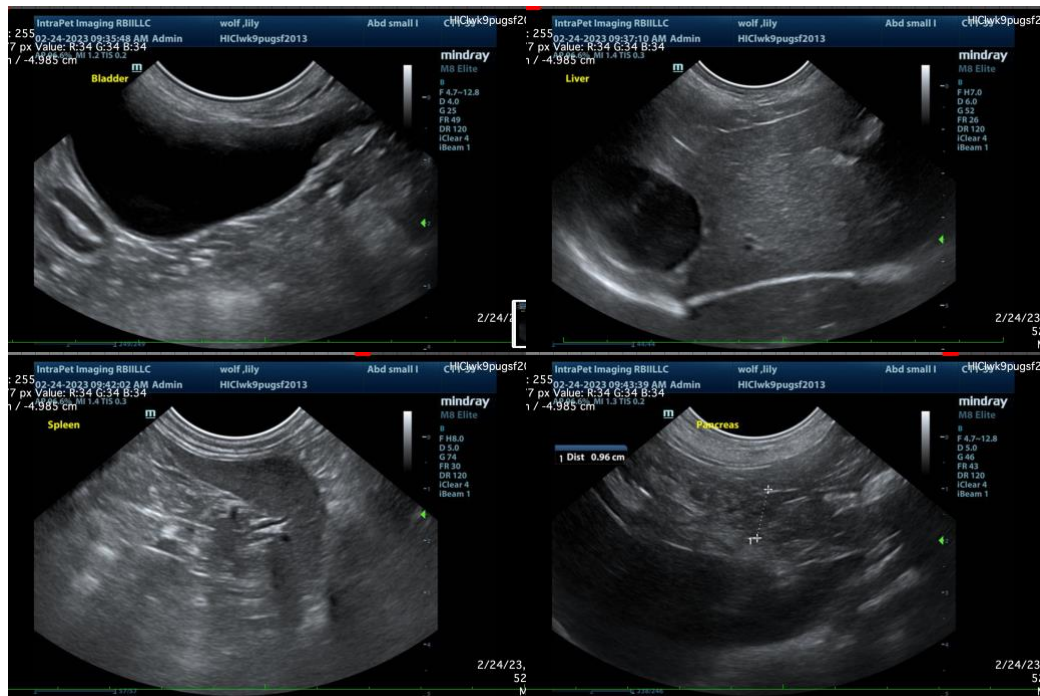
- Moderate gallbladder debris. The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

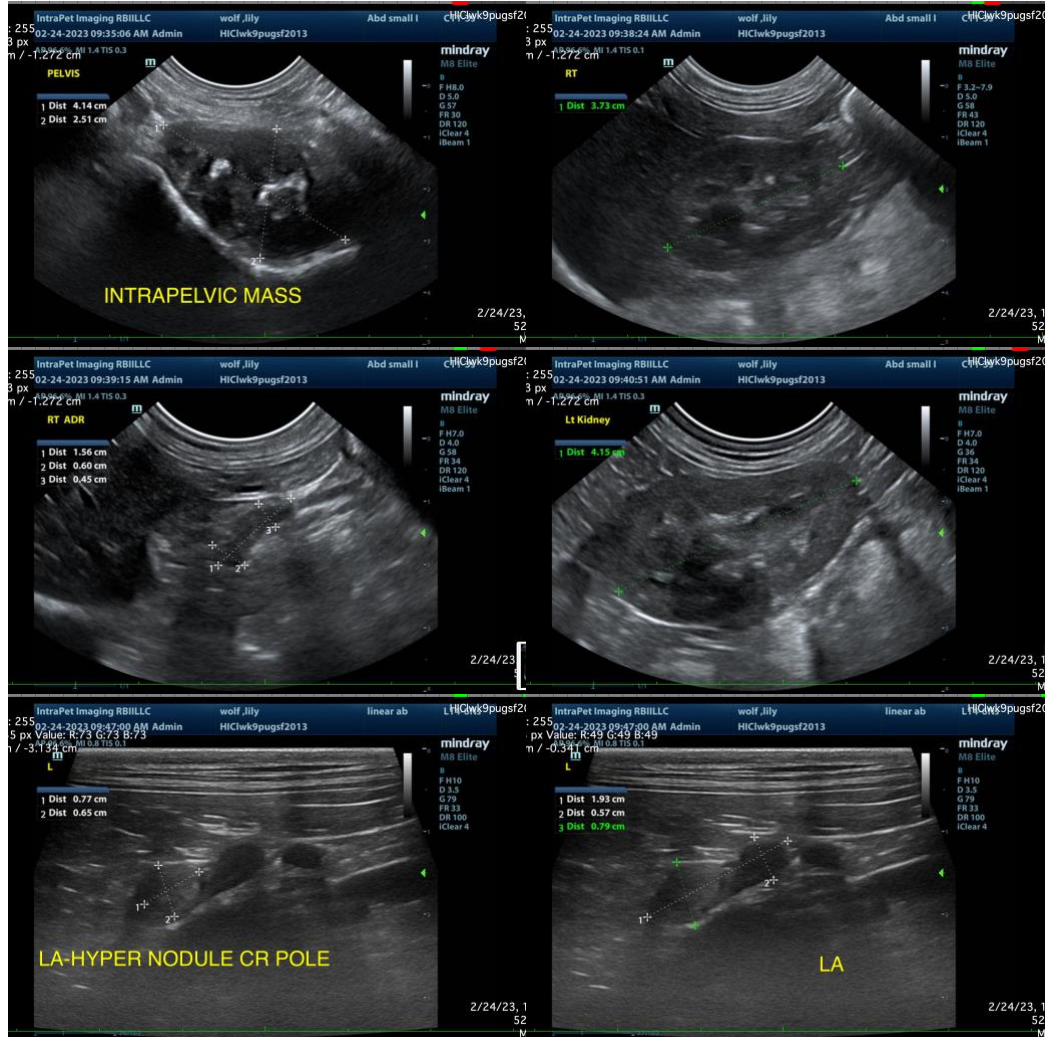
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a large mineralized intrapelvic mass visualized, which appears to be situated between the urethra and the colon, most consistent with a mass effect arising from the uterine stump, although other possibilities exist. This could represent a benign or neoplastic lesion. If a safe window can be obtained, a fine needle aspirate could be considered. Alternately, ideally, a contrast CT scan would be performed to better evaluate the intrapelvic region and determine its origin more definitively in preparation for possible surgical intervention.

Additionally, there is a hyperechoic nodule in the cranial pole of the left adrenal gland. This is likely an incidental finding at this time. This could represent a benign or an early neoplastic lesion, and this could be secreting hormone or be nonsecretory. Initially, I would recommend a blood pressure evaluation. If hypertension is present, consider catecholamine levels, screening for a pheochromocytoma. If signs of Cushing's are present, you could consider adrenal function testing. If no symptoms are associated with this lesion, your options moving forward would be a contrast CT scan to further evaluate for possible surgical resection or following this lesion with ultrasound (recheck in 2-3 months) to see if its changing and if further action is necessary. If a contrast CT scan is performed to look at the intrapelvic mass, the left adrenal should be evaluated at the same time.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.





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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