**DATE PRESENTING CLINICAL SIGNS**

8/25/22 Eight month history of inappropriate elimination and what appears to be urine leakage.

PATIENT Current Medications: Tried PPA unsuccessfully.

Izzy Macenko

Lab Results: Azotemia, isosthenuria.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

SPECIES

Feline

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**BREED**

DSH

SEX

Spayed Female

AGE

3/3/03

WEIGHT

5.84 Pounds

INTERPRETED BY

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(Small Animal Internal
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IMAGING PERFORMED BY

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HOSPITAL NAME

Bay Country VH

REFERRING VET

Dr. Bauer

INVOICE

40763

Urinary System

The urinary bladder is moderately distended with large primarily suspended echogenic debris present. 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 calculi. Echogenic debris of this type can be associated with small crystals, cellular debris and proteinaceous debris.

The left kidney has a normal shape and size (2.9 cm) with mild pyelectasia at 0.24 cm. Overall echogenicity is slightly hyperechoic with poor 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 (3.4 cm). Overall echogenicity is slightly hyperechoic with poor 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 0.52 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 0.39 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 homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are 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 <0.36cm 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 uniform diameter with minimal fluid distension. Wall thickness is normal to slightly increased. Bowel loops follow a typical curvilinear path with distinct wall layering, but some areas display a prominent muscularis layer which does not display the typical 1:3 muscularis:mucosa layer ratio. Jejunum wall measures 0.24 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 hypoechoic as 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. Prominent pancreatic duct measuring 0.22 cm.

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. No significant lymphadenopathy noted. The omentum is diffusely hyperechoic.

Other

There appears to be a tubular fluid-filled structure visualized between the urinary bladder and the colon. This structure is most consistent with a uterine body. This can be followed rostrally, revealing what appears to be a fluid dilated right uterine horn and a left uterine horn. There is a mixed echogenic cystic mass effect visualized in the right side of the abdomen measuring 4.2 cm x 3.69 cm. This could be associated with the right uterine horn or some other abdominal structure in that region (a direct attachment is not clearly visualized). Alternately, this could represent a right ovary, although there is the suspicion of a normal right and left ovary visualized (alternately this could be lymph node, etc.). The structure appearing to be normal right ovary measures 1.88 cm. The left measures 0.84 cm x 0.78 cm.

ULTRASONOGRAPHIC FINDINGS

- Large tubular structure visualized in the region of the urinary bladder and abdomen – most consistent with an intact large, thickened uterus with free fluid visualized in the right horn. This could represent a pyometra, mucometra, etc.
- Large mixed echogenic/cystic right abdominal mass – This mass could be associated with the right uterine horn, the right ovary, etc. Other possibilities exist.
- Large echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Decreased corticomedullary distinction in both kidneys with left-sided pyelectasia – Mild loss of corticomedullary distinction in both kidneys could be consistent with chronic degenerative disease or interstitial nephrosis. Pyelectasia of the left kidney could be consistent with pyelonephritis, chronic renal disease, secondary to PU/PD or fluid therapy (if applicable), other.

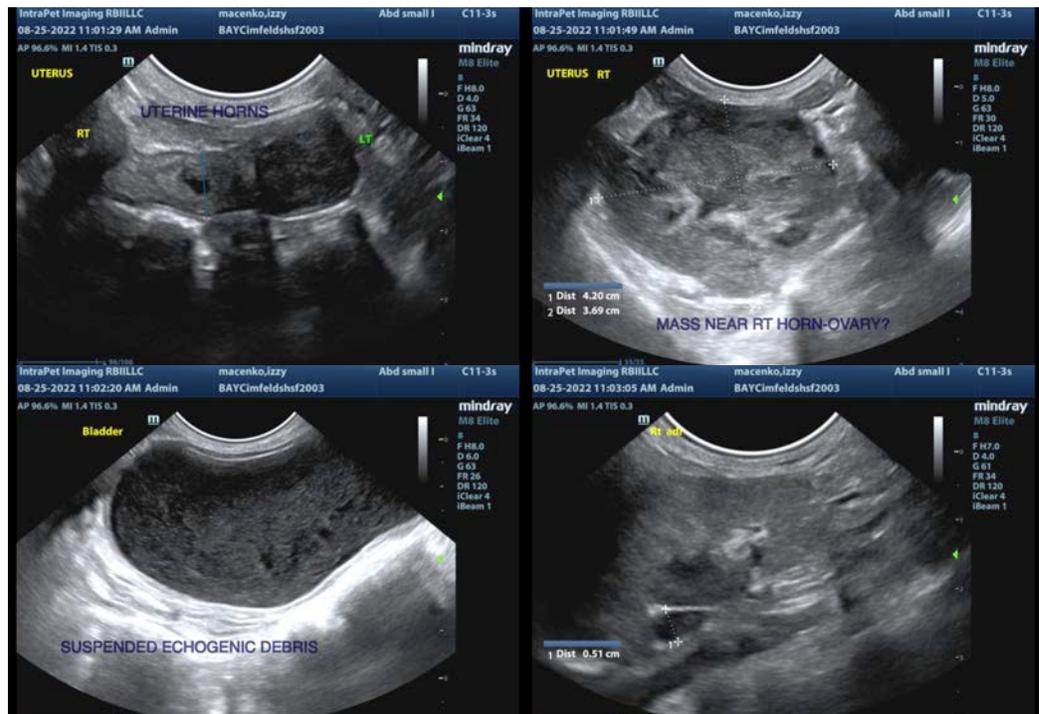
- Hypoechoic prominent pancreas – The pancreatic changes are most consistent with mild pancreatitis or a recent episode of pancreatic inflammation.
- Mildly “ropey” appearing small intestine – The mild small intestinal wall changes may be a normal variant in this patient or could be consistent with an inflammatory process (e.g., inflammatory bowel disease).

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is a concern for a possible intact female with a large, thickened, partially fluid filled uterus. Correlate this with clinical signs and history. Has this patient been exhibiting signs of estrus? Additionally, there is a large right-sided mass effect that could be associated with the uterus or ovary, but this cannot be definitively determined. Options moving forward would include exploratory surgery for possible spay and mass removal, or a fine needle aspirate of the abdominal mass, or you could consider a contrast CT scan to obtain better detail to try and ensure a good surgical plan.

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

There is a large amount of echogenic debris visualized in the urinary bladder and mild pyelectasia in the left kidney. Recommend a urinalysis, culture and blood pressure evaluation, as mild pyelonephritis is possible.







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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