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DATE PRESENTING CLINICAL SIGNS

10/12/22 Lethargic and not eating X 3 days, painful abdomen.

PATIENT

Brownie Huber
Current Medications: Convenia 0.36cc 80mg/ml, eats l/d
Radiographs: possibly enlarged kidneys, thickened intestines, possibly enlarged uterus
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

SPECIES

Canine

BREED

Chihuahua X

SEX

Intact Female

AGE

2/22/10

WEIGHT

8 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Honeygo AH

REFERRING VET

Dr. Mullenex

INVOICE

42098

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 left kidney has a normal shape and size (3.51 cm) with numerous small non-obstructive nephroliths. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.64 cm) with numerous non-obstructive nephroliths. Overall echogenicity is slightly hyperechoic with poor corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is borderline large measuring 0.71 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. Visualization of the left adrenal was difficult due to interference from the large fluid filled uterus. Recommend reevaluation of the adrenal once this patient has fully recovered.

The right adrenal gland is normal in size measuring 0.49 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. There is a hypoechoic nodule visualized on the left side of the liver measuring 1.17 cm x 0.62 cm.

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 <0.7cm 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

There is a scant amount of free abdominal fluid. No lymphadenopathy is noted. The omentum is generally of increased echogenicity.

Other

There is a very prominent fluid-filled uterus present within the abdomen. The fluid visualized appears echogenic. The uterine body appears thick walled and distended with a wall thickness of 0.66 cm. The diameter of the uterine body at the bifurcation is 3.2 cm x 5.7 cm.

ULTRASONOGRAPHIC FINDINGS

- Large, distended fluid-filled uterus with an irregular uterine body – Findings are consistent with a pyometra, mucometra, etc. The uterine body thickening could be due to inflammation, infection, or infiltrative neoplasia. Recommend an ovariohysterectomy and histopathology on the uterus.
- Prominent left adrenal gland – The significance of this is unclear. Recommend reevaluation once this patient has recovered.
- Decreased corticomedullary distinction in both kidneys with non-obstructive nephroliths – The bilateral renal findings are consistent with age-related change.
- Hypoechoic nodule visualized within the liver – The significance of this is unclear. This could represent a benign or neoplastic process. The appearance trends towards a more benign lesion.
- 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.
- Scant free abdominal fluid

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

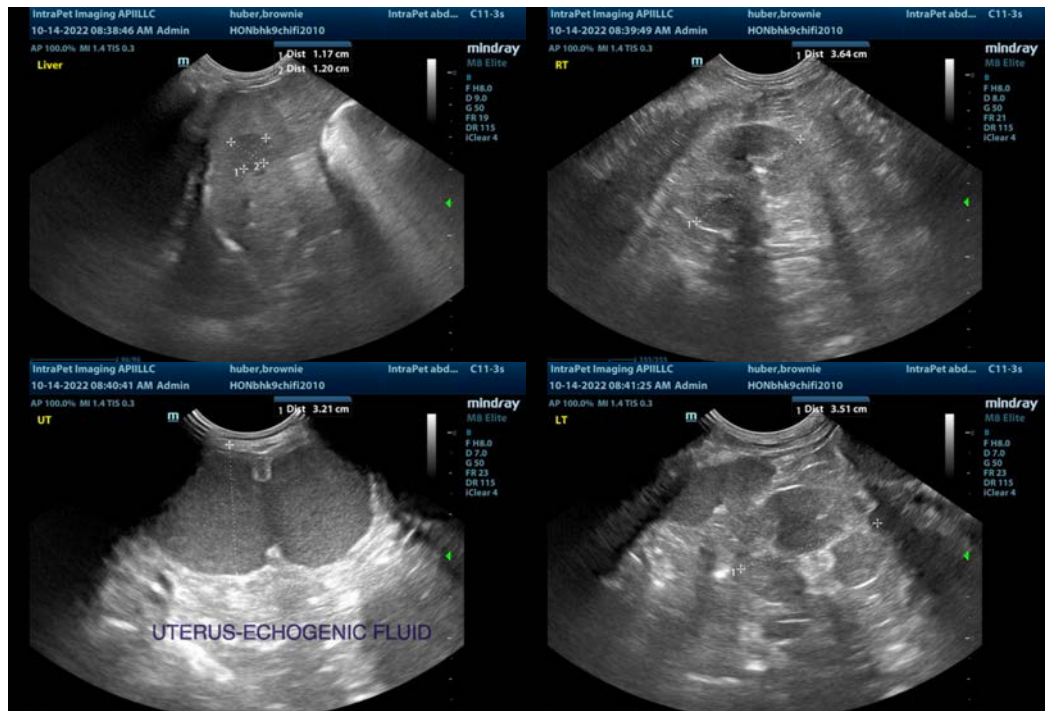
There is a large, distended fluid-filled uterus in the abdomen with scant free abdominal fluid and echogenic material within the uterus. Recommend an ovariectomy with histopathology on the uterine body, as it appears thickened and irregular.

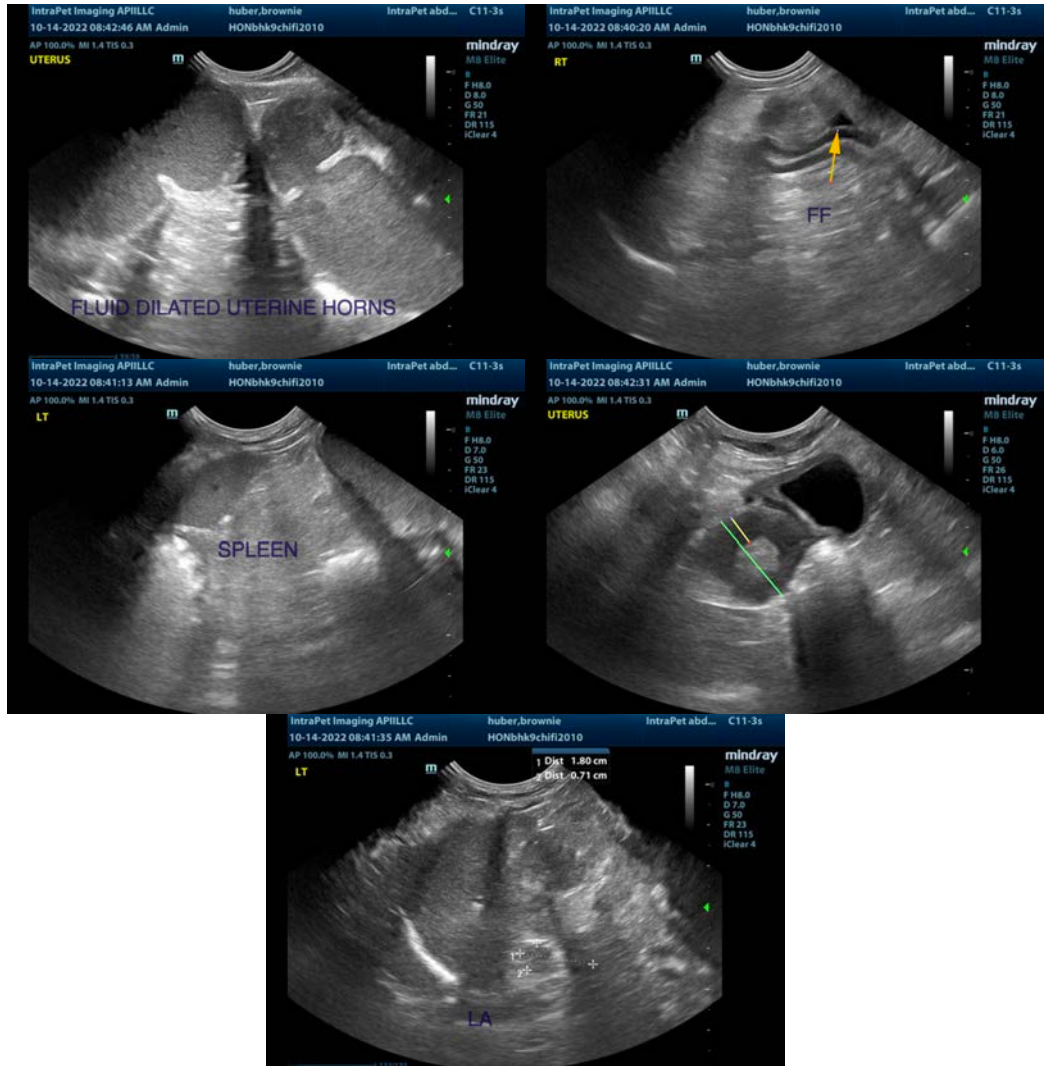
The adrenals were challenging to see on today's scan due to interference from the uterus. Recommend reevaluation once this patient has recovered, as the left adrenal gland appears prominent.

There is decreased corticomedullary distinction and non-obstructive nephroliths visualized in both kidneys. These are likely chronic progressive changes associated with age. Recommend a blood pressure, urinalysis and culture.

There is a hypochoic nodule visualized within the liver. Recommend continued monitoring of this lesion. If it is enlarging, recommend a fine needle aspirate.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.





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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