

**DATE PRESENTING CLINICAL SIGNS**

4/25/23

Was here yesterday for possible pregnancy, off and on lethargy, and recent pain where she was reluctant to go up steps and seemed painful when owner picked up. Bloodwork normal; NSF on radiographs; tx with SQ fluids, Carprofen, and Provable. Abdomen not painful on palpation yesterday. Since going home she has seemed to get more painful, has been whining a lot. Sometimes taking her for walks would help her stop whining. She also seems uncomfortable when just laying down. Owner concerned for GI blockage as she appears to be straining to defecate, and only passes small amounts very soft stool.

PATIENT

Coco Shiling

SPECIES

Canine

Current Medications: Unasyn, Gabapentin, Buprenorphine.

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: STAT requested.

Imaging Performed By: Rachel Brillhart, RDMS.

BREED

Yorkshire Terrier mix

SEX

Female, intact

AGE

5/1/2014

WEIGHT

11.5 lbs.

INTERPRETED BY

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 Diplomate ACVIM
 (Small Animal Internal
 Medicine)

HOSPITAL NAME

Animal Emergency
 Hospital

REFERRING VET

Dr. Martinoli

INVOICE

14840

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone is normal.

The left kidney is normal in size (3.68 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. The cortex is isoechoic relative to the spleen. There is moderate loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

The right kidney is normal in size (3.54 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is moderate loss of corticomedullary distinction. The cortex is isoechoic relative to the spleen. A hyperechoic medullary band is observed at the corticomedullary junction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.57 cm at cranial pole) (0.72 cm at caudal pole) (1.82 cm in length) with a prominent caudal pole and smooth curvilinear peripheral contours. A 0.99 cm mildly hyperechoic nodule is observed at the caudal aspect. The glandular echogenicity and detail at the cranial aspect are unremarkable. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.58 cm at cranial pole) (0.45 cm at caudal pole) (1.68 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.26 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately 1:1. The gall bladder lumen is moderately distended. The wall is thin and smooth. A scant amount of echogenic debris is observed within the lumen. The cystic and common

bile ducts are normal/not seen.

Gastrointestinal

The gastric lumen is moderately distended with ingesta. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is segmentally dilated with chyme. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

A portion of the pancreas is obscured by the gastric distention. In the visible portion of the right limb the pancreas is normal to slightly prominent in size with minimal deviation from the normal peripheral contours. The parenchyma is mildly hyperechoic relative to surrounding omental fat and slightly mottled in appearance. No distinct focal lesions are observed. The pancreatic duct is visible but not overtly dilated.

Free Abdomen

There is no obvious evidence of free fluid. The abdominal lymph nodes are normal/not visible.

Other

The ovaries are subjectively normal in size (left ovary 0.86 x 0.50 cm; right ovary 0.92 x 0.62 cm). No obvious pathology is observed.

The uterus is mildly and diffusely fluid distended (left horn 0.69 cm; right horn 0.67 cm; uterine body 0.54 cm). The uterine wall is normal in thickness.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- The uterine changes could be consistent with hydrometra, mucometra or pyometra.

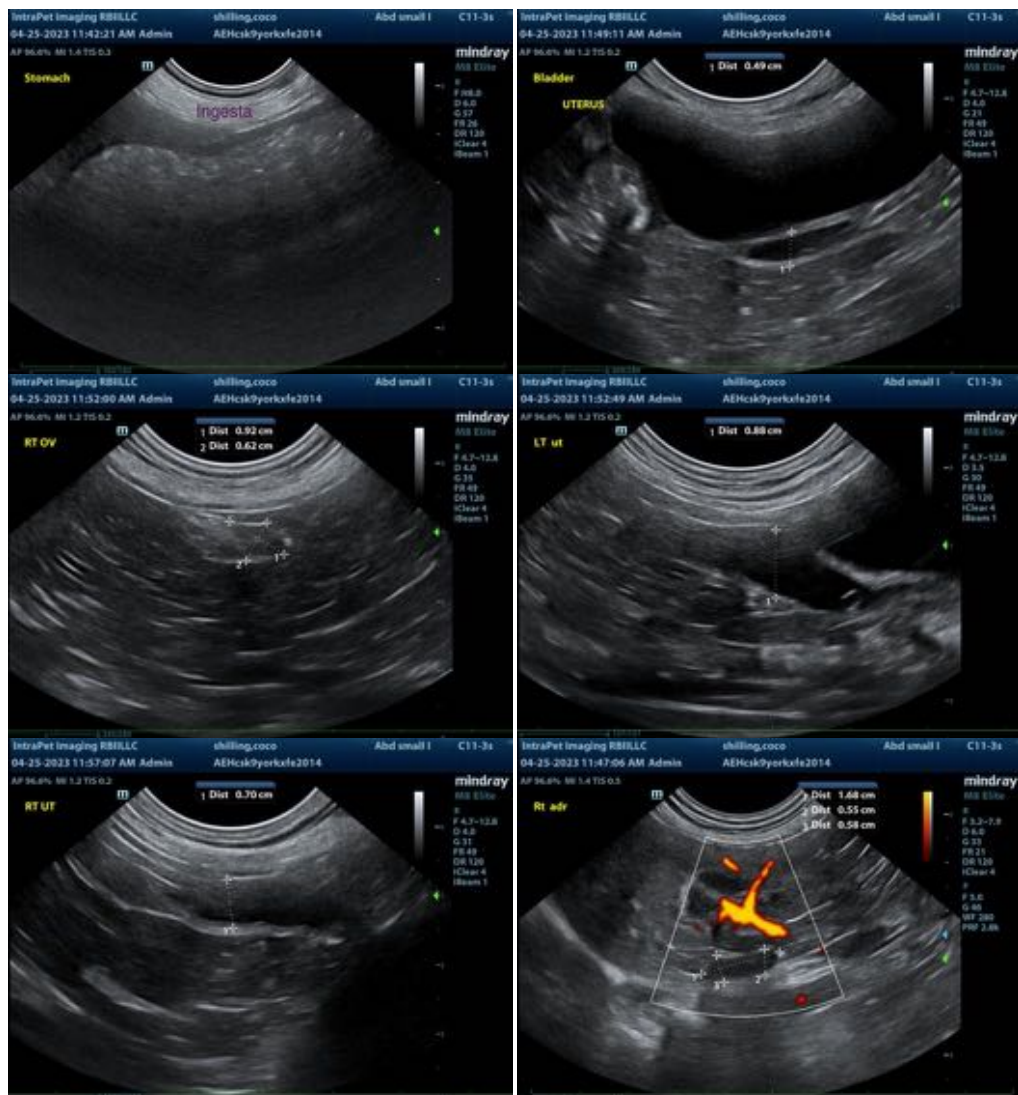
Secondary Findings:

- Bilateral, chronic renal changes with non-obstructive nephrocalcinosis.
- The left adrenal nodule could be consistent with benign macronodular hyperplasia or an emerging tumor (i.e., adenoma, adenocarcinoma, pheochromocytoma).
- The diffuse hepatic changes are non-specific and are most consistent with vacuolar hepatopathy (i.e., endocrine, idiopathic). However, correlation with the patient's liver values is recommended.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- If the patient was fasted for this study, the presence of ingesta within the gastric lumen could suggest delayed gastric emptying.

*An obvious cause for the patient's clinical signs is not definitively identified in this study. Considerations include orthopedic/neurologic disease, underlying metabolic issue, pyometra, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Orthopedic and neurologic examinations are recommended.
- Consider three-view thoracic radiographs (if not already performed) to assess for occult disease in the chest and bony lesions (i.e., ribs/spine).
- Consider a urinalysis with a culture and sensitivity to assess for occult pyelonephritis.
- Also consider a cPLI to assess for pancreatitis.
- Given the uterine changes, a vaginal cytology is recommended to further evaluate for pyometra.
- If the patient continues straining to defecate, consider a fecal evaluation for ova and Giardia +/- a colonoscopy with biopsies.
- Further diagnostics/treatments should be based on the results of the above diagnostics.





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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