

**DATE PRESENTING CLINICAL SIGNS**

6/20/23 Urinary signs that are on/off. Recent signs for a few weeks' duration. Smelly urine, going in abnormal spots, lethargic. PE unremarkable.

PATIENT

Polly Linkous Current Medications: None.
Lab Results: On two occasions large amount of RBC, blood and true proteinuria on UAs. No evidence of bacteria or WBC. Chem and CBC wnl. T4 wnl.

SPECIES

Feline Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

BREED

DSH

SEX

Spayed Female

AGE

7/31/12

WEIGHT

11.4 Pounds

INTERPRETED BY

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HOSPITAL NAME

Aberdeen Vet Clinic

REFERRING VET

Dr. Fritz

INVOICE

43291

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is moderately distended with mild 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 is irregular in shape (likely due to an infarct in the cranial and caudal pole) measuring 3.2 cm with occasional small non-obstructive nephroliths. Overall echogenicity is normal with adequate 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 (3.61 cm). Overall echogenicity is normal with adequate 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, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The region of left adrenal (Cranial to left renal artery) is unremarkable but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

The region of the right adrenal (between right cranial kidney and vena cava) is unremarkable, but the adrenal is not distinctly visualized. No evidence of a mass effect is visualized.

Spleen

The spleen is subjectively normal in size (0.93 cm), 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 mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

The stomach contains moderate shadowing debris. 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. The shadowing debris in the stomach appears focal with a soft shadow. If ingesta is thought unlikely, a hairball should be considered.

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 0.13-0.38cm in wall thickness) and the jejunum measured as normal (between 0.15-0.36cm.) 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, 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.

ULTRASONOGRAPHIC FINDINGS

- Echogenic debris in the urinary bladder – The echogenic debris in the bladder lumen could be consistent with cells, crystals, and/or mucus.
- Small, non-obstructive nephroliths and previous infarcts noted associated with the left kidney – The renal lesions identified are ill defined and hyperechoic, these could be consistent with previous renal infarcts and can be an indicator of current or previous renal disease.
- Shadowing material visualized within the gastric lumen – Correlate with feeding history and abdominal radiographs and consider the possibility of a hairball if the patient was adequately fasted.

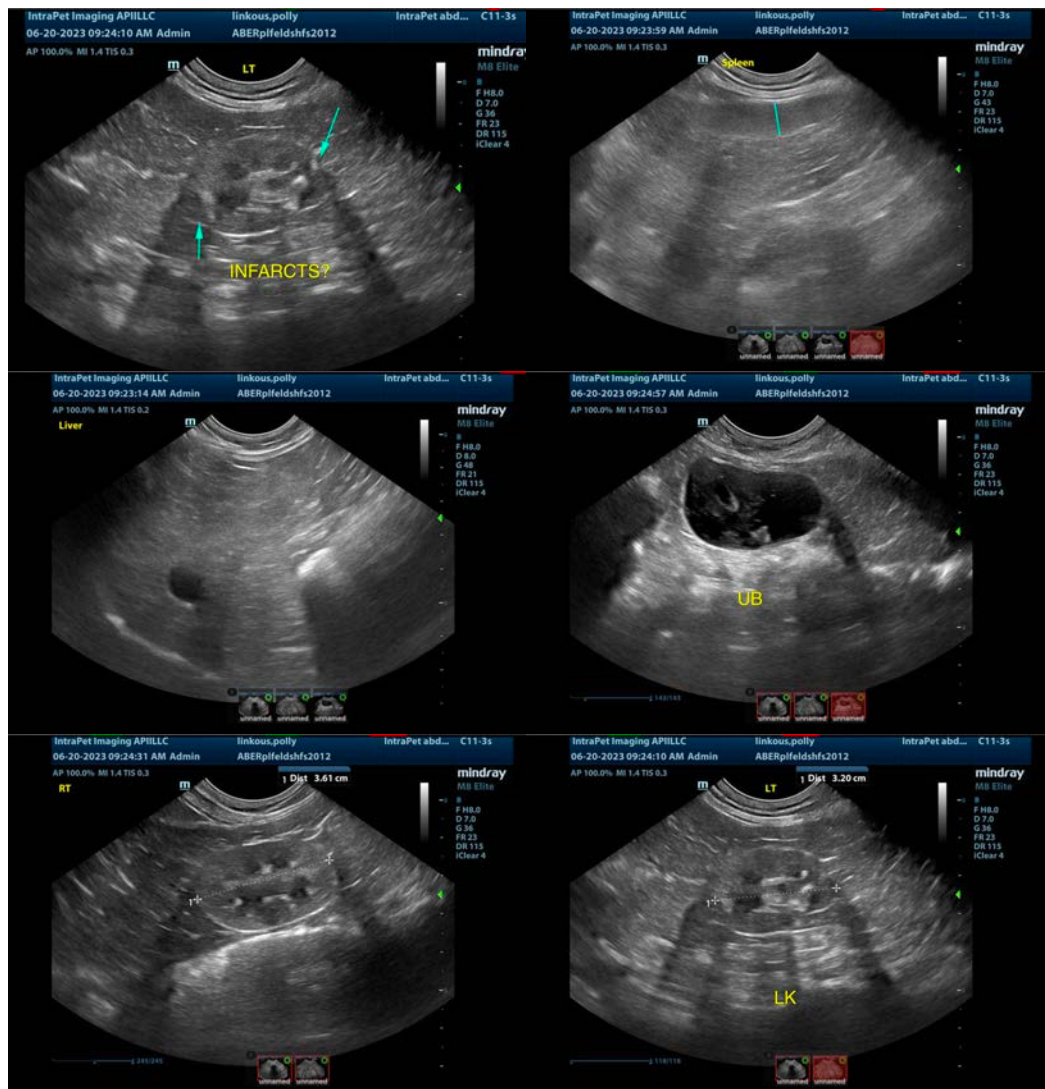
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No focal stones or mass effects were visualized associated with the urinary bladder. The left kidney is irregular with likely previous infarcts and some small stones, but these do not appear obstructive at this time.

If not already done, recommend a urine culture to accompany a urinalysis obtained at the same time (provided there has been no antibiotic therapy in the last week. If the urine is sterile, then consider the possibility of inflammatory cystitis, less likely a distal urethral region (the intrapelvic urethra cannot be visualized with ultrasound. If feline interstitial cystitis is suspected, consider the following:

- Treatment of FIC can be frustrating as it is a waxing and waning disease. Treatment strategies vary and there is no “one fits all” approach. There is currently no cure for FIC. Goals of therapy include reduction of severity and duration of clinical signs during an acute episode; increasing the interval between episodes; and decreasing severity of signs in cats with persistent FIC. Approximately 85% of cats will experience clinical improvement with or without therapy.
- Numerous therapies can be considered including: diet, multimodal environmental modification, analgesics, anti-inflammatories, anti-anxiety medications etc..
- Close observation is warranted as some cats do experience life-threatening urinary obstruction.
- If symptoms are worsening re-evaluation with ultrasound should be considered.

Consider blood pressure evaluation, as there could be early renal disease present, and monitor for GI signs or possible symptoms of a hairball. Additionally consider hairball remedy.





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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