

**DATE PRESENTING CLINICAL SIGNS**

11/2/22 Patient showing signs of heat after being spayed.

PATIENT

Sookie Schultz Current Medications: Gabapentin prior to visits.
Lab Results: Vaginal cytology- 2-3 large intermediate epithelial cells per hpf. AMH test.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: DKT IM.
Stat Report: Not requested.

SPECIES

Feline

BREED

Lynx

SEX

Spayed Female

AGE

4/24/18

WEIGHT

9.2 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Stephanie Warga
RDCS, RVT

HOSPITAL NAME

Banfield Timonium

REFERRING VET

Dr. Kameka

INVOICE

42513

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The urinary bladder is adequately distended with primarily anechoic contents. However, there is also a large amount of echogenic, suspended, non-shadowing and echogenic gravity dependent, settled debris present. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal in size (3.49 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

The left kidney is normal in size (3.43 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

Adrenal Glands

Adrenal glands are bilaterally uniformly plump egg-shaped adrenals, hypoechoic in echogenicity with bilateral dystrophic mineralization noted. This is most likely a benign age-related change. This change can be caused by chronic stress/disease, so investigation for/management of other disease (chronic kidney disease, hyperthyroidism, etc.) is recommended. The right adrenal gland measures 0.48 cm. The right adrenal gland measured 0.42 cm.

Spleen

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

Liver

The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

Gastrointestinal

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

Pancreas

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

Free Abdomen

There is no evidence of free peritoneal effusion noted in these images.

There is no apparent lymphadenopathy noted in these images.

The uterine stump is subjectively mildly prominent. There is no definitive evidence of an ovarian remnant. However, subjectively there is mildly increased blood flow in the area of the left ovary.

PRIMARY FINDINGS

- Large amount of urinary bladder debris – Believed to be more significant than is typically seen with suspended lipid in a cat.

SECONDARY FINDINGS

- Age related adrenal gland changes

**There is no obvious definitive evidence of an ovarian remnant or reason for this patient's heat-like behavior. However, the subjectively prominent uterine stump and potentially mildly increased blood flow in the area of the left ovary are soft findings that could potentially support an ovarian remnant. Again, however, these could be normal post-spay variation in a cat as well.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

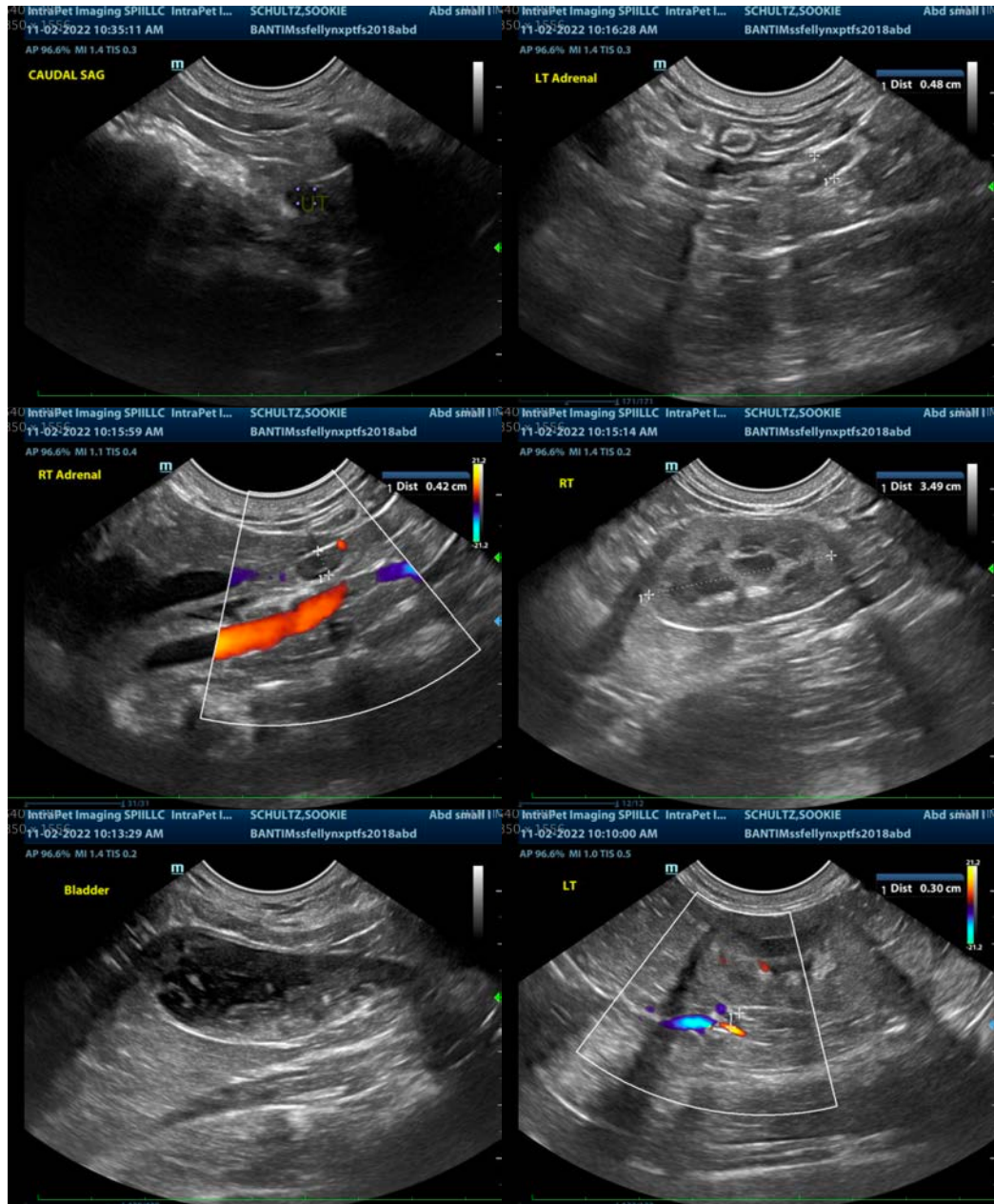
Recommendations include proceeding based on hormone test results. Pending the results of the AMH level, next steps may include additional hormone testing such as luteinizing hormone, or potentially progesterone post-ovulation, etc., or ultimately, if hormone testing is not definitive, as not all ovarian remnants are large enough to produce AMH, an exploratory laparotomy may be necessary to definitively rule out an ovarian remnant.

Having said this, the exact signs of heat that this cat is displaying are unknown based on the history provided. Given the large amount of urinary bladder debris, could the signs be urinary in nature? Given that question, Urinalysis and, if indicated based on urinalysis results, urine culture are recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ration is recommended.

In the face of negative urine culture(s) and no cystoliths, masses, etc., these urinary signs are most consistent with sterile cystitis or feline lower urinary tract disease (FLUTD).

Recommendations include maximizing water consumption (water fountains, canned food, etc) as well as reducing stress (recommendations can be found at Indoor Cat Initiative out of The Ohio State University

CVM). Transition to a urinary health diet such as Royal Canin Urinary SO (or similar) could also be considered.





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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