

IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

DATE PRESENTING CLINICAL SIGNS

4/7/23 Recurrent cystitis. Would like more information about kidneys and bladder before discussing a epispioplasty.

PATIENT

Sadie Taylorson
Current Medications: None listed.
Lab Results: See attached.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brillhart, RDMS.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

BREED

Cavalier King Charles
Spaniel

SEX

Spayed Female

Urinary System

The urinary bladder is moderately distended with severely echogenic urine. There is a large amount of suspended swirling echogenic debris as well as dependent sandy mineralized debris. The Bladder wall is mildly diffusely thickened, but focally in the ventral apical region there is more severe thickening measuring up to 0.76 cm in width. The region of the trigone and ureteral papillae appear relatively normal with no mass lesions or calculi. The urethra appears somewhat irregular and thickened, measuring 0.39 cm in diameter with linear mineralizations possibly consistent with mineralization of the urethra wall.

AGE

4/14/16

WEIGHT

26.5 Pounds

INTERPRETED BY

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

The left kidney has a normal shape and size (4.8 cm) with an occasional focal mineralization, one of which measures 0.22 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, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (4.46 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 left adrenal gland is normal in size measuring 0.48 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It appears slightly irregular in that there is an ill-defined hyperechoic region in the mid body of the adrenal measuring 0.47 cm in diameter.

HOSPITAL NAME

Festival Vet Clinic

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.

REFERRING VET

Dr. Cianelli

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.

INVOICE

46507

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 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

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.

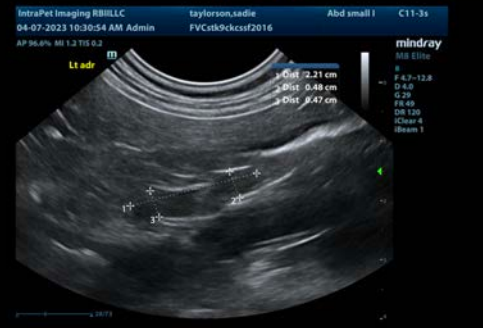
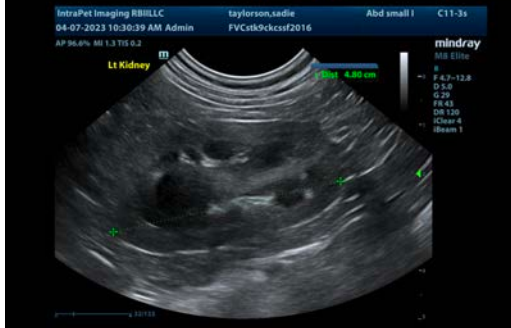
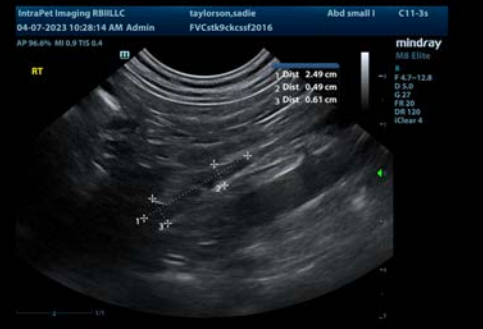
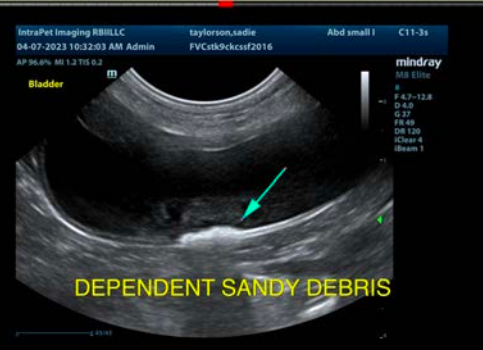
ULTRASONOGRAPHIC FINDINGS

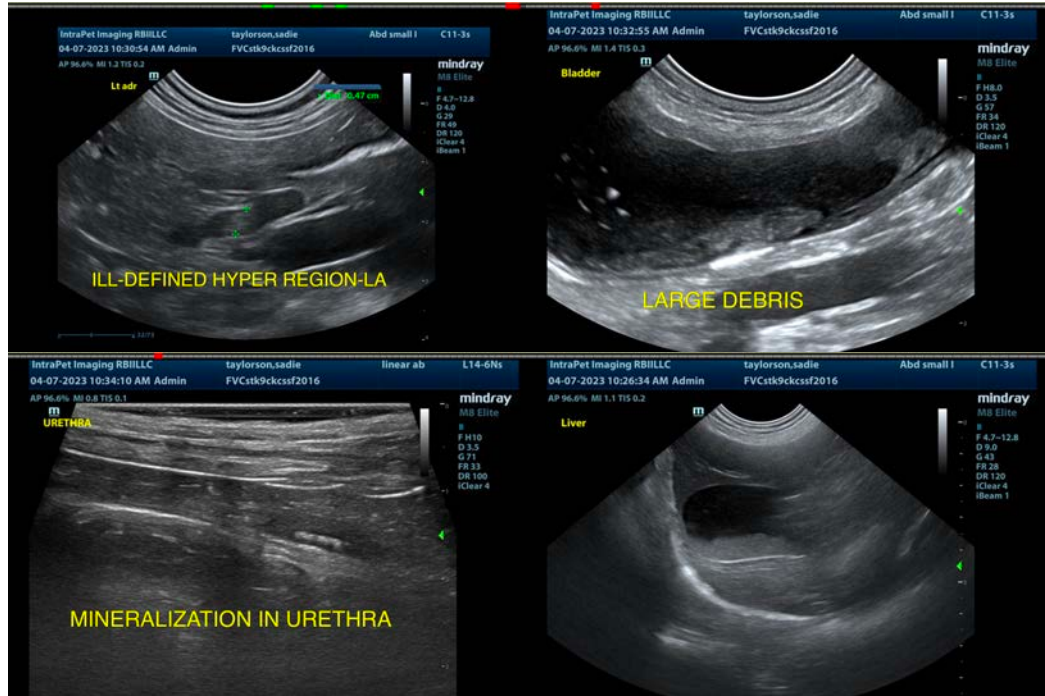
- Large volume suspended and dependent echogenic/mineralized debris with wall thickening diffusely and focally in the ventral apical region as well as thickening of the urethra with possible mineralization.
- Ill-defined hyperechoic region in the mid body of the left adrenal – This lesion does not deform the adrenal at all. The appearance favors a benign lesion such as hyperplasia, although an early neoplastic lesion cannot be ruled out.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The changes observed in the urinary bladder are most consistent with severe cystitis. Recommend urinalysis and culture and reevaluation of the urinary bladder mid treatment to ensure that the wall changes have resolved. Evaluate bloodwork and history, looking for any factors that could predispose to recurrent UTIs (diabetes, Cushing's, underlying renal disease, immunosuppressant medications, etc.). If none are identified, then consider possible anatomic abnormalities such as an ectopic ureter, patent urachus, juvenile vulva, etc. In this individual, I might consider cystoscopy initially to rule out any irregularities in the bladder wall, ureters, vaginal vault, etc. prior to considering a vulvoplasty, unless the external vulvar anatomy is definitively abnormal. If cystoscopy is performed, a biopsy of the bladder wall for culture and histopathology should be considered.

Recommend chronic probiotic therapy in this individual and spacing antibiotic and probiotic therapy by at least one hour.





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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com