

DATE PRESENTING CLINICAL SIGNS

2/24/23

Known Hypothyroid. About 2 weeks ago had an episode of vomiting, tends to eat things. Owner started a bland diet then she was fine. The next day she was not bearing weight on the right front. Owner gave Carprofen then she was fine. Recently she will occasionally yelp. Saturday started vomiting, then NPO, bland diet Monday and now she has not eaten since and still seems very painful. To RDVM today. Xrays abnormal. BW- Alkp-296, Tbili-1.0, WBC's-4.9, bands suspected RDVM found FF on fast scan, hemorrhagic

PATIENT

Mabel Wagner

Current Medications: None listed.
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

BREED

Basset Mix

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder mucosa, trigone, and visible urethra are normal in thickness and there is no evidence of mucosal irregularities. The bladder lumen is mildly distended with a large volume of anechoic urine and bladder thickness is considered normal for volume of urine.

SEX

Spayed female

The left kidney is severely abnormal with such severe distortion that normal architecture is difficult to distinguish. There is a rim of cortical tissue that can be identified on some loops, but the contour is very irregular and the cortex is mottled in appearance. There is significant hydronephrosis that measured up to 3.36 cm wide. The urine within the pelvis is slightly echogenic. Within the proximal ureter there is a hyperechoic structure that measures approximately 3.0 x 3.67 cm with Power Doppler there may be blood flow to this structure; however, if so, it is minimal. Surrounding the kidney there is highly echogenic flocculent effusion and the retroperitoneal tissue is hyperechoic with edema and effusion. The severely abnormal appearance of the retroperitoneal tissue continues to the level of the bladder where there is similarly significant pockets of echogenic effusion and hyperechoic fat that is lobular in appearance.

AGE

11/9/15

WEIGHT

81 lbs

INTERPRETED BY

Jessica Midence, DVM,
DACVIM (SAIM)

The right kidney is fairly normal in size, shape and architecture with smooth peripheral margins and measures 7.32 cm. However, there was scant retro peritoneal effusion that could be seen from the views of the right kidney.

HOSPITAL NAME

Animal Emergency
Hospital

Adrenal Glands

The left adrenal gland could not be visualized, nor could the area be adequately assessed given the severity of retroperitoneal/renal pathology.

REFERRING VET

Dr. Ruby

The right adrenal gland is normal in size at 0.68 cm at the caudal pole and 0.65 cm at the cranial pole. The right adrenal gland has normal shape and it is normal in appearance and echogenicity.

Spleen

The splenic echotexture is homogeneous with parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule is smooth with no irregularities. The splenic vasculature is normal without signs of congestion or thrombosis.

INVOICE

42970

Liver

The liver is subjectively normal in size and hypoechoic with prominent, portal markings. There was a small amount of anechoic effusion around the left liver lobe.

The gallbladder lumen is moderately distended and there was a small amount of dependent hyperechoic, echogenic debris that has settled throughout the exam. The cystic and common bile ducts are normal/not visible.

Gastrointestinal Tract

The gastric lumen is empty. The stomach wall is of normal wall thickness with some variability due to rugal folds. There is normal gastric wall layering. There are no masses or focal lesions observed and the pyloric outflow tract appears normal.

The visualized areas of duodenum, jejunum and ileum appear normal in thickness. The duodenum is normal with distinct wall layering. The remainder of the small intestines are normal with normal wall layering. The lumen of the small intestine was empty with no signs of ileus, obstruction or foreign material. . No focal lesions observed.

The section of colon are visualized with incompletely formed fecal and is mildly corrugated, but has normal thickness and normal wall layering.

Pancreas

The area of 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. The visible pancreatic duct was normal.

Peritoneum

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

1. Severely obstructed pyo-nephrotic left kidney with surrounding retroperitoneal effusion and inflammation. Rule out ruptured renal abscess versus abscess/necrotic rupture secondary to obstructive ureteral tumor.

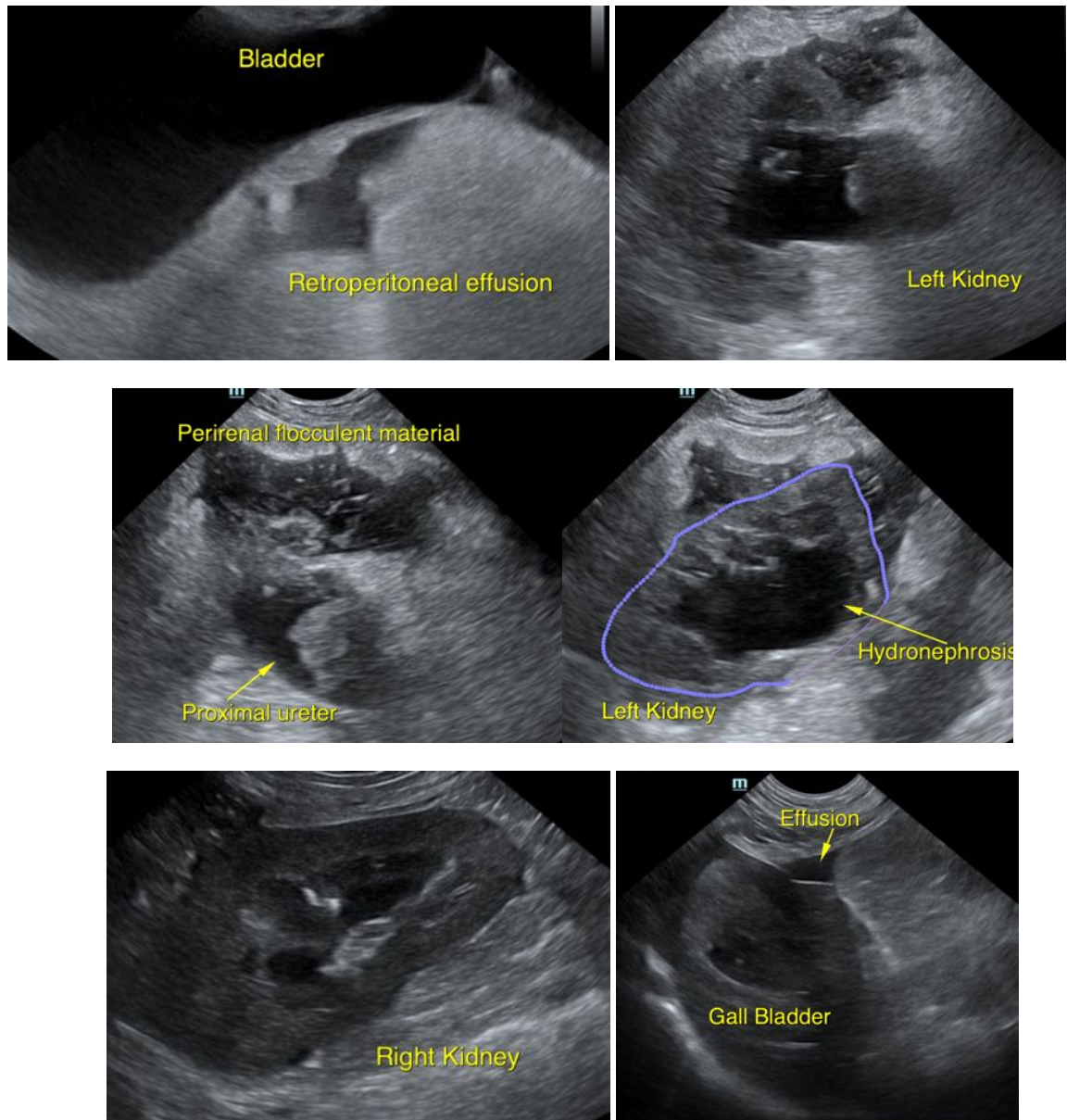
Secondary Findings

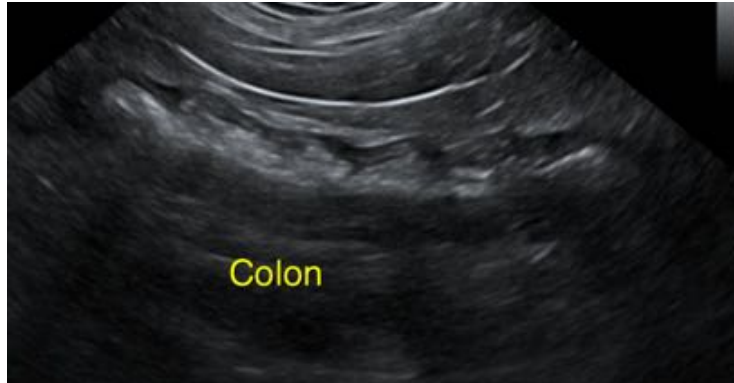
1. Reactive hepatopathy. Suspected hyperbilirubinemia of sepsis.
2. Biliary sludge.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There is severe distortion of the left kidney, and it is difficult to recognize normal anatomy. The kidney is obstructed as the proximal ureter measures approximately 3.4 cm in width. Within the proximal ureter there is a mass like wad of tissue that may have blood flow with Power Doppler. However, it was minimal so this mass could be a collection of exudated debris, granuloma, etc., but there is concern for a neoplastic mass. There is significant inflammation and effusion around the kidney and the effusion is highly echogenic and flocculent and this effusion and inflammation tracks down the entire retroperitoneal space to the level of the bladder to the possibility of a neoplastic mass in the ureter. There is concern for septic rupture of this kidney (either by necrosis of a mass or severe pyo-nephrosis that has ruptured). CT scan may help to provide clarity. FNA of this echogenic material outside the kidney could be considered for cytology and culture. FNA of the ureteral mass under heavy sedation could also be considered, but ultimately surgical removal of the left kidney is likely necessary. Aggressive antibiotic therapy should also be considered.

The liver was mildly hypoechoic and there was a mild amount of anechoic effusion surrounding the liver. There was a mild amount of biliary sludge. Given the other findings on the ultrasound reactive hepatopathy with hyperbilirubinemia of sepsis are considered a likely explanation for the lab work changes.





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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