IMAGING PERFORMED BY

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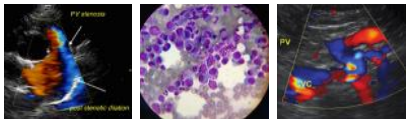

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
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DATE

4/29/22

PATIENT

Miley Freburger

SPECIES

Canine

BREED

Pug

SEX

Spayed Female

AGE

12/1/10

WEIGHT

19.2 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Fork Vet Hospital

REFERRING VET

Dr Doherty

INVOICE

37295

PRESENTING CLINICAL SIGNS

History of bladder stones which extended back a few years without any consistent clinical signs. Over the past month, dog has had a persistent degree of hematuria and bladder stone was thought to be the cause as it had slowly been enlarging. About 1 week ago 4/20/22, cystotomy performed (bladder had normal outer surface appearance and mucosa at incision site appeared normal. A single stone (calcium oxalate) was removed. Post -op rads show no additional stones. Dog spent night at ER for monitoring and the dog had cath. removed the following day (24 hrs after surgery). Since that time, dog has had a persistent hematuria with clots. No improvement in degree of hematuria since immediately post-op and owner has concerns that something else is ongoing. Dog still exhibiting some degree of urgency to void but BAR behavior and normal thirst and appetite.

Current Medications: Baytril 22.7 mg - 2 tablets once daily.
Lab Results: Stone- calcium oxalate; Pre-op blood profile WNL.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with echogenic urine. A focal areas of bladder wall in the dependent portion, most consistent with incision line for the cystotomy, appears thickened and somewhat irregular, with a width of 1.0 cm. Additionally, there is echogenic floating material, which I suspect is most consistent with clotted material and red blood cells. The area of the trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The left kidney has a normal shape and size (3.51 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (3.36 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of 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 0.42 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.50 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.

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.

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 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.

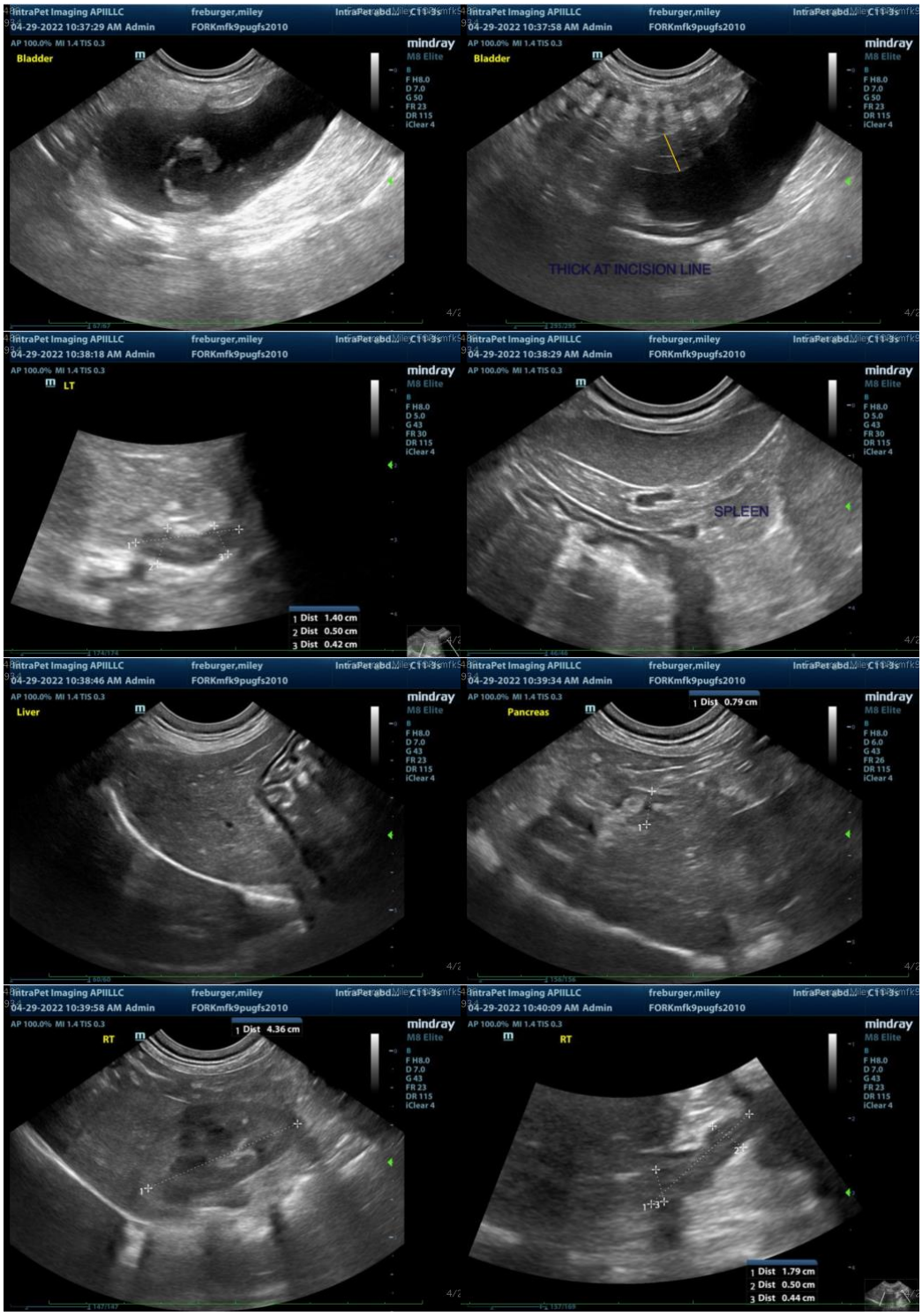
Free Abdomen
Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Focal thickening of the urinary bladder wall (consistent with previous incision line) and intraluminal debris, consistent with clot and red blood cells – The focal thickening of the urinary bladder wall is most consistent with the incision line. Intracellular debris within the urinary bladder is most consistent with clot/hemorrhage.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The thickening at the incision line of the urinary bladder wall is commonly seen. This can be due to swelling, suture reaction, hemorrhage and clots, etc. It is unknown if the hemorrhage currently visualized is due to dissolution of a blood clot, or if there is ongoing current hemorrhage. Correlate with red blood cell count, etc., and consider consultation with a veterinary surgeon, as I suspect this could resolve on its own. However, if there is a concurrent coagulopathy (seems unlikely if external incision line looks ok) or a very vascular bladder wall due to inflammation, then continued hemorrhage is possible. No additional stones or lesions thought to be consistent with a mass lesion are observed.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Bladder
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Bladder
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M8 Elite
THICK AT INCISION LINE
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LT
mindray
M8 Elite
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2 Dist 0.50 cm
3 Dist 0.42 cm
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Pancreas
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RT
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mindray
M8 Elite
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RT
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M8 Elite
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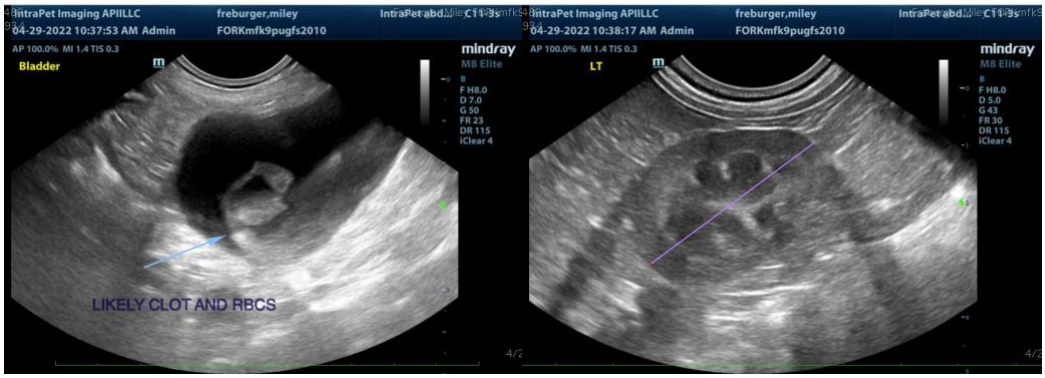
2 Dist 0.50 cm
3 Dist 0.44 cm



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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