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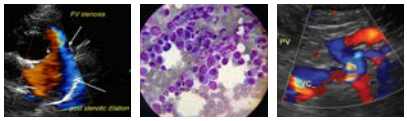

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DATE

5/25/22

PATIENT

Biscuit Murphy

SPECIES

Canine

BREED

Bichon Frise

SEX

Neutered Male

AGE

1/7/15

WEIGHT

22.6 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Stephanie Pearce RDCS, RVT

HOSPITAL NAME

Belvedere Vet Center

REFERRING VET

Dr. Moulder

INVOICE

37943

PRESENTING CLINICAL SIGNS

P presented to ER for pain defecating. O initially thought there was an anal gland issue. ER took radiographs that were initially suspicious enlarged/potentially mineralized prostate along with potential enlargement of sublumbar LN. P is extremely sensitive to palpation of the area.

Current Medications: Rimadyl, Tramadol, Gabapentin
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Torbugesic IV.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, or masses. In the dependent portion of the urinary bladder, there is a string of small hyperechoic shadowing foci, most consistent with very small stones, measuring approximately 0.20-0.35 cm in diameter.

The prostate is slightly large, measuring approximately 1.4 cm in height in the sagittal view and 2.81 cm in length. It is slightly irregular in contour with mildly mottled parenchyma. There is mineralization in the region of the prostatic urethra, which could be intraluminal sandy debris or early mineralization in the region of the prostatic urethra.

The left kidney has a normal shape and size (4.87 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 (4.95 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 0.40 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 0.43 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 is moderately dilated with fluid and irregular shadowing material most consistent with normal ingesta and gas. 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 layering 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. Duodenum wall measured 0.48 cm. Jejunum wall measured 0.33 cm. 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. There is a prominent irregular lymph node visualized in the sublumbar region, which has hyperechoic tissue at the center, which appears to be somewhat shadowing and possibly mineralized. This lymph node measures 0.62 cm x 1.46 cm. The omentum is generally of normal echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Mildly enlarged, irregular prostate with mineralization (intraurethral sandy debris versus parenchymal mineralization) – These findings could be consistent with neutering after puberty and some urethral sandy debris, or more concerningly could represent early parenchymal mineralization and irregularity, which could be seen with prostatic neoplasia. Recommend fine needle aspirate of the prostate.

- Small, focal shadowing mineralizations in the urinary bladder – most consistent with numerous small cystic calculi. Correlate findings with abdominal radiographs. Recommend urinalysis and culture.

- Moderate amount of shadowing ingesta within the gastric lumen – Correlate with feedings history and abdominal radiographs. If adequately fasted then consider such differentials as delayed gastric emptying or a partial outflow tract obstruction (none visualized).

- Prominent irregular, mildly mineralized sublumbar lymph node – This lymph node is not significantly enlarged, but given the changes observed in the prostate, there is the possibility of this representing a metastatic lesion.

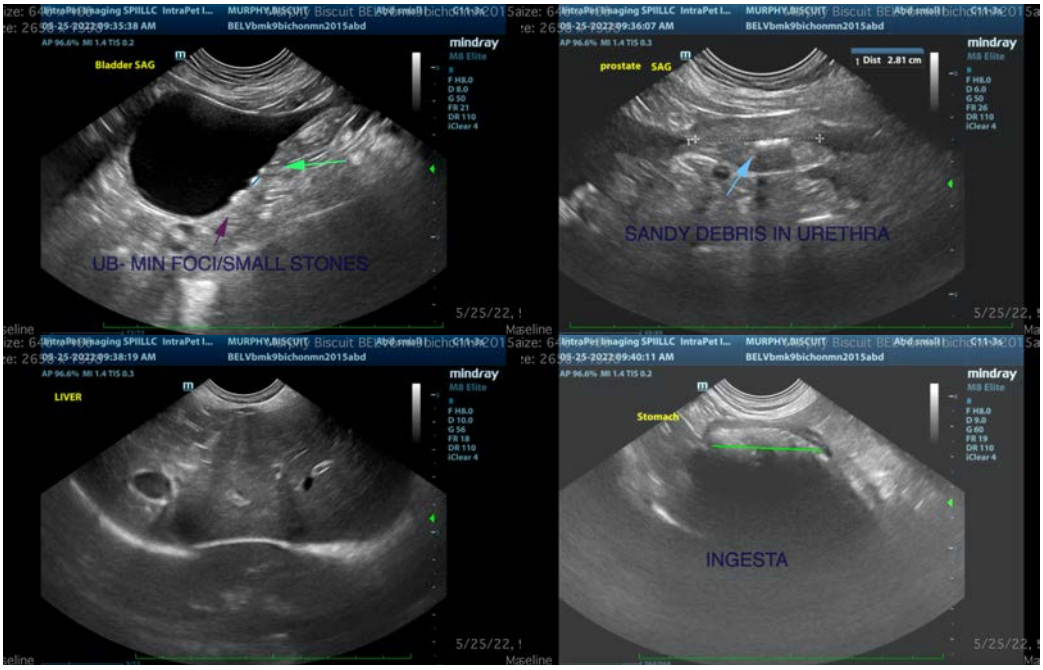
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

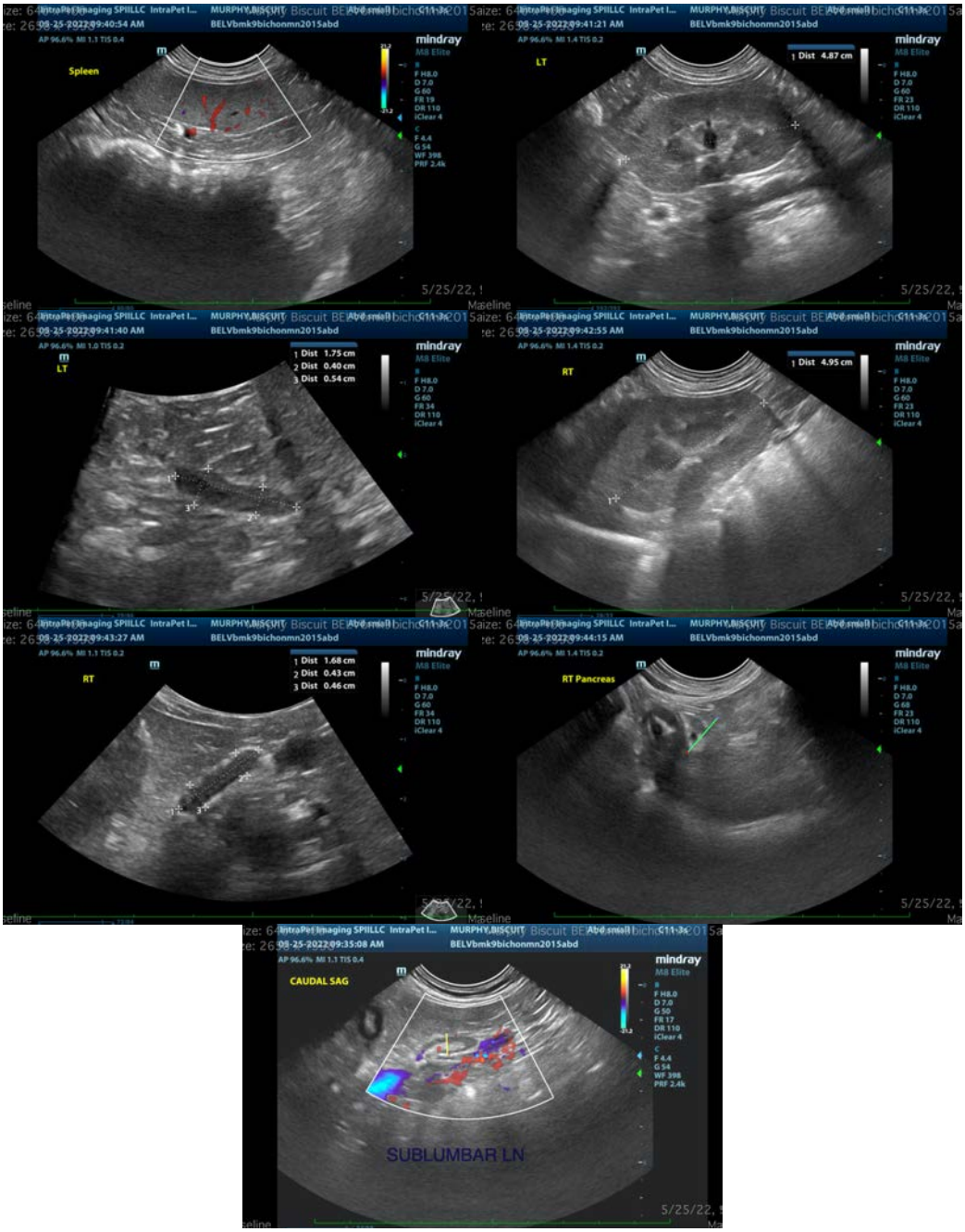
Correlate the prostatic findings with the age of neutering. If this pet was neutered prior to puberty, this prostate is abnormal and should have a fine needle aspirate in addition to urinalysis and culture. Heavy sedation may be necessary for this procedure. Examination of the anal glands and sublumbar lymph nodes rectally should be performed at the same time (if not done already). I would additionally consider catheterization of the urethra under heavy sedation to see if the mineralization observed represents sandy debris within the urethra, or if it is truly parenchymal disease (flush urethra and check prostate with ultrasound). If this pet was neutered after puberty, this could represent an involuted diseased prostate and be somewhat less concerning, but a prostatic aspirate would still be recommended. Additionally, consider radiographs of the pelvic region to look for evidence of sublumbar mets, discospondylitis, and mineralization of the sublumbar lymph node, all of which can contribute to pain in that region.

The sublumbar lymph node additionally appears irregular with hyperechoic tissue and some soft shadowing(?). Correlate this appearance with radiographs, looking for mineralization in the area. If this lymph node is mineralized, it would be concerning for possible metastatic disease from the prostate, although it is not all that significantly enlarged, so this is questionable.

Consider three view thoracic radiographs to rule out concurrent thoracic disease/involvement.

There are numerous small stones within the urinary bladder. Recommend urinalysis and culture. I suspect these are too large to pass, but monitoring for urethral obstruction is warranted.





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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