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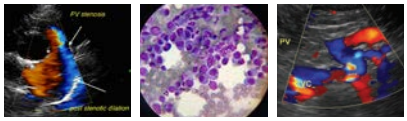

SonoPath
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DATE

11/29/22

PATIENT

Kewnu Charintranont

SPECIES

Canine

BREED

Pit Bull X

SEX

Neutered Male

AGE

9/29/13

WEIGHT

70 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Andi Parkinson RDMS

HOSPITAL NAME

Perry Hall AH

REFERRING VET

Dr. Miller

INVOICE

42998

PRESENTING CLINICAL SIGNS

Patient presents for evaluation of hematuria. Recently had successful MCT removal with clean margins. Prior AUS, (for staging,) showed prostatic cystic lesion. MCT removal took priority. Now patient is having hematuria. C&S showed no growth, and radiograph showed no bladder stones.

Current Medications: None current.
Date of Previous IntraPet Ultrasound: 8/9/22. See attached.
Sedation: Patient sedated with Dexdomitor.
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, masses or cystic calculi.

The prostate is large, measuring 2.4 cm in height in the sagittal view and 2.8 cm long (previous measurement 8/9/22 was 1.62 cm x 2.45 cm). It has an irregular shape with slightly irregular external margins. The parenchyma is significantly heterogeneous with some focal hyperechoic regions most consistent with mineralization. There is a large, irregular cystic region in the caudodorsal section of the prostate measuring >1.19 cm x 1.29 cm (previous measurement 8/9/22 was 1.49 cm x 1.23 cm). Additionally, the pre-prostatic urethra appears somewhat distended, and the prostatic urethra appears to have irregular tissue within the lumen, most consistent with mass invasion into the prostatic and pre-prostatic urethra.

The left kidney has a normal shape and size (6.94 cm) with numerous small cortical cysts. 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.

The right kidney has a normal shape and size (7.38 cm) with numerous small cortical cysts. 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 0.69 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 0.87 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 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. A sublumbar lymph node is somewhat prominent today, measuring 0.93 cm (previous measurement 8/9/22 was 0.87 cm). The omentum is generally of normal echogenicity.

ULTRASONOGRAPHIC FINDINGS

- Large, irregular, heterogeneous prostate with a cystic lesion, focal mineralization, and suspected invasion of the prostatic urethra – Findings are concerning for progression of the abnormalities previously visualized in the prostate. The prostate appears somewhat larger and more irregular with more mottled texture and mineralization. Additionally, the prostatic urethra appears partially obstructed with tissue, suggesting possible invasion.

- Prominent sublumbar lymph node – Findings could be consistent with inflammation, infection, or metastasis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

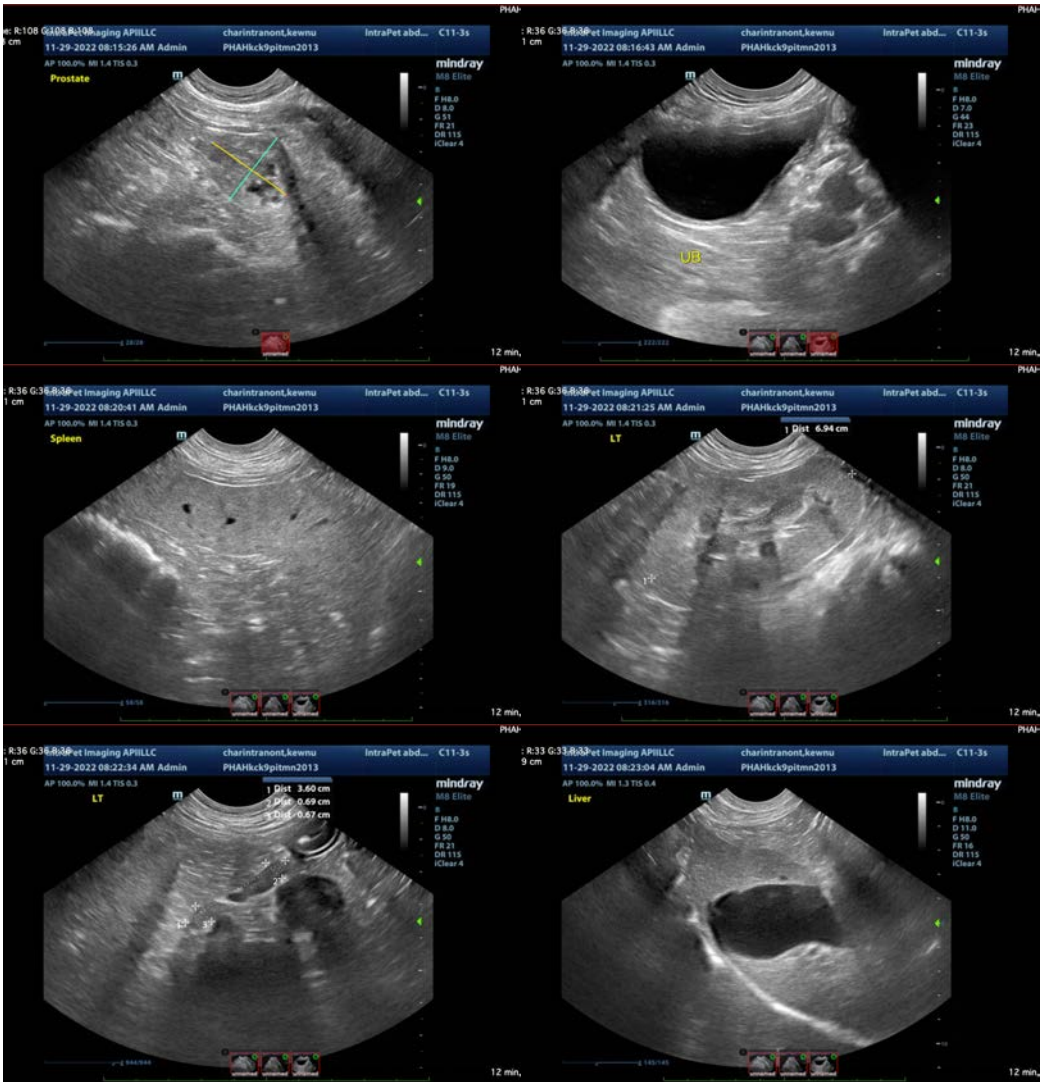
The prostate appears irregular with both parenchymal changes, a large cystic structure, and foci of mineralization. Additionally, the pre-prostatic urethra appears somewhat distended and there is the appearance of soft tissue within the prostatic urethra. These changes are concerning for possible progression of a prostatic lesion, neoplasia being the most likely. Other possibilities such as an additional source of testosterone (exogenous hormone exposure, testosterone secreting mass, retained testicle, etc.) with prostatitis and abscessation, etc. are possible but much less likely. Recommend a urinalysis and culture and a fine needle aspirate of the prostate. Additionally, a traumatic catheterization is likely to be helpful, as there

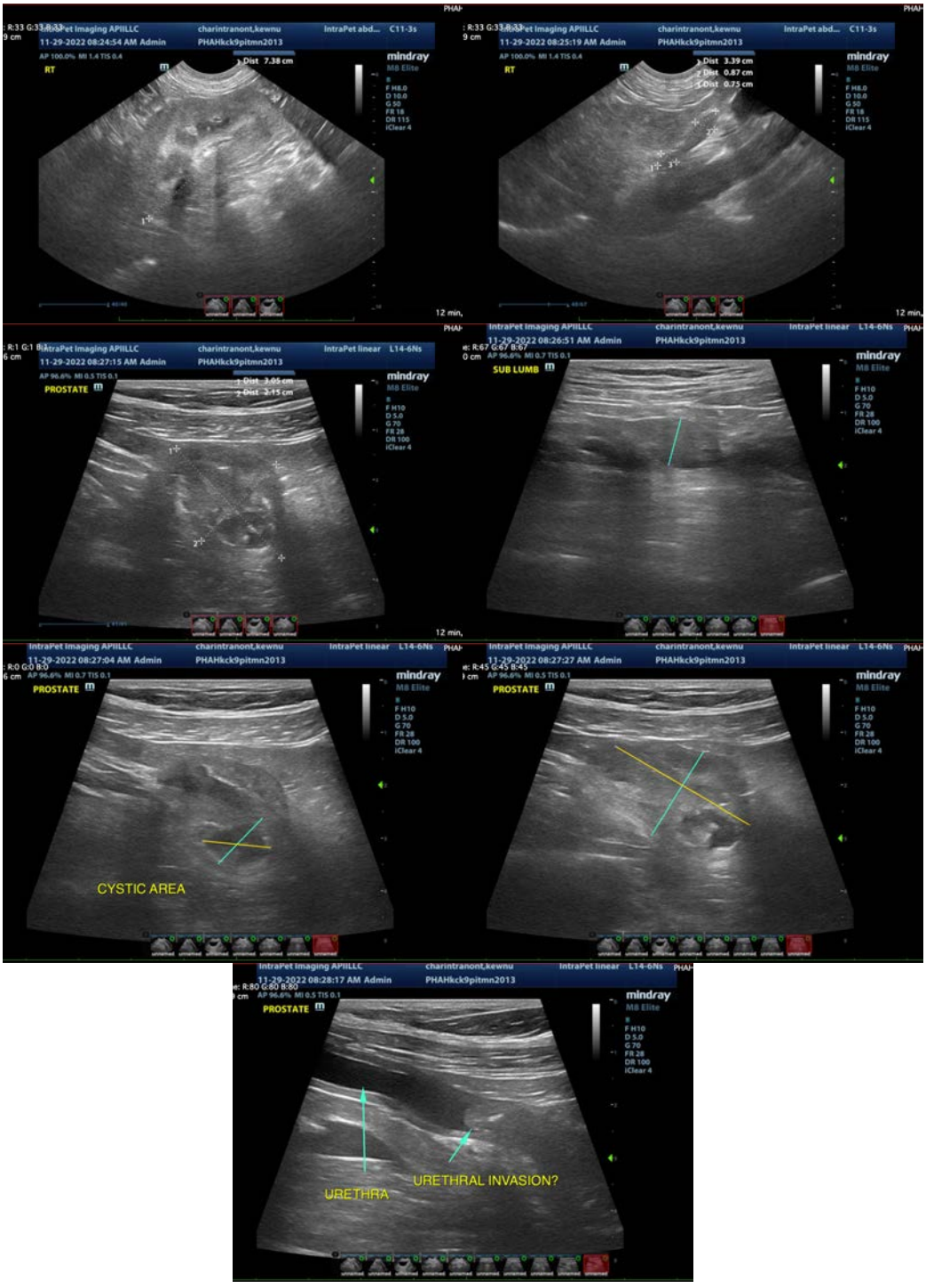
appears to be abnormal intraurethral tissue (I believe this was done concurrently with today's exam).

The sublumbar lymph node appears relatively stable in size but is prominent. This could likely be a reactive lymph node, but metastatic change cannot be ruled out. If a cytologic diagnosis cannot be obtained based on traumatic catheterization and a fine needle aspirate of the prostate, a urine BRAF test could be considered, but this would not be definitively diagnostic, and a negative urine BRAF test has not diagnostic utility and requires additional testing.

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

If cytology is consistent with prostatic carcinoma, recommend consultation with a veterinary oncologist regarding treatment options and prognosis.




mindray
RT
PROSTATE
SUB LUMB
CYSTIC AREA
URETHRA
URETHRAL INVASION?

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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