IMAGING PERFORMED BY

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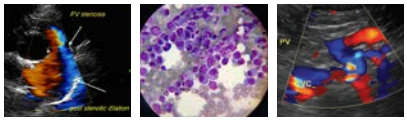

SonoPath

Clinical Sonography & Telecytology

EDUCATIONAL TELECONSULTATION SERVICES™

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DATE

11/11/22

PATIENT

Boozer Baliles

SPECIES

Canine

BREED

German Shepherd X

SEX

Neutered Male

AGE

4/25/11

WEIGHT

70.9 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Stephanie Warga RDCS, RVT

HOSPITAL NAME

Honeygo AH

REFERRING VET

Dr. Mullenex

INVOICE

42706

PRESENTING CLINICAL SIGNS

Not eating, drinking and urinating more. Lethargic.

Current Medications: Apoquel 16mg since 2018 1 SID, Trazodone 100mg SID PRN for anxiety- PRN since 2018.
Lab Results: Increased WBC 18.9 (4-15.5).
Radiographs: Bladder stones, possible free fluid, chest WNL.
Date of Previous IntraPet Ultrasound: No previous.
Sedation: Dexdomitor/Telazol/Torbugesic.
Stat Report: Requested/Approved.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended with mildly echogenic urine. The Bladder wall appears relatively smooth and of normal thickness. There is a moderate amount of dependent mineralized material most consistent with small stones/sandy debris and possibly a more focal stone at 0.72 cm. This sandy debris/small stones extends into the urethra, and there are mineralizations evident within the prostatic urethra.

The prostate is normal in size (1.3 cm) and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. There are mineralizations evident within the prostatic urethra, consistent with sandy debris/small stones.

The left kidney has a normal shape and size (6.99 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.

The right kidney has a normal shape and size (7.44 cm) with a small non-obstructive nephrolith. 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.

Adrenal Glands

The left adrenal gland is normal in size measuring 0.65 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 0.65 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 large, irregular, and diffusely nodular. The blood flow through the hilus and splenic parenchyma appears normal. The spleen is severely irregular with no normal parenchyma visualized. There are intraparenchymal hypoechoic nodules and motheaten nodules. Additionally, towards the tail of the spleen there are more discrete mass lesions, with a large mass lesion measuring 6.6 cm x 5.65 cm. A second mixed echogenic mass lesion measures 4.1 cm x 2.4 cm.

Liver
The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is heterogenous in echotexture with subtle, indistinct focal mottling. The visible portions of the vasculature and biliary tract appear normal. There are diffuse ill-defined, hyperechoic nodules throughout the hepatic parenchyma. These vary in size from roughly 1-2 cm and do not appear to disrupt the architecture of the liver.

The gall bladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. There is a moderate amount of non-organized echogenic debris. The cystic and common bile ducts are normal/not visible.

Gastrointestinal
The stomach is mild to 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 measures 0.52 cm. Jejunum wall measures 0.46 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
There is a large amount of mildly echogenic fluid in the abdomen. No lymphadenopathy is noted. The omentum is diffusely hyperechoic, and in some areas appears slightly nodular. Findings could be concerning for omental metastasis, but this could also represent inflammatory change.

Other
A brief view of the heart was submitted. No significant pericardial effusion was seen.

There is a superficial mass lesion visualized in the mid abdomen measuring 2.7 cm x 4.6 cm. This lesion is homogeneous and slightly hypoechoic compared to surrounding fat. The appearance is most consistent with an intraabdominal lipoma.

ULTRASONOGRAPHIC FINDINGS

- Calculi/sandy debris visualized in the urinary bladder, proximal urethra, and prostatic urethra – Recommend urinalysis and culture. Correlate with abdominal radiographs.

- Severely irregular, nodular spleen with two large mass lesions – The appearance of the spleen is most concerning for a neoplastic process. Consider a fine needle aspirate.

- Diffuse ill-defined hyperechoic nodules in the liver – Typically, the appearance of these nodules would be most consistent with a benign process, but given the diffuse splenic changes, underlying

neoplasia is possible. Consider a fine needle aspirate.

- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

- Large free abdominal fluid – Sampling was performed and imaged during the ultrasound exam. Recommend fluid analysis and cytology (or a packed cell volume if this is blood).

- Isoechoic, homogeneous mass lesion in the mid abdomen – The appearance of this lesion is most consistent with a lipoma. Recommend a fine needle aspirate.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The spleen is severely nodular with diffuse nodules and large mass lesions. These changes would be most consistent with hemangiosarcoma or histiocytic sarcoma, although other differentials exist.

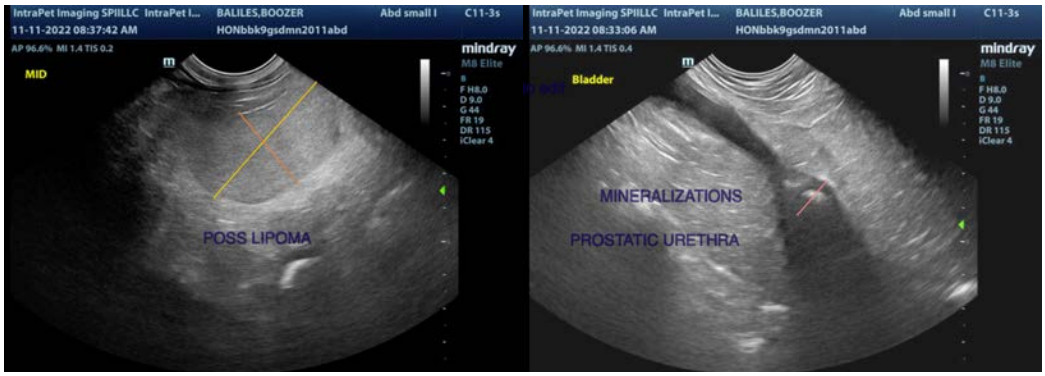
Additionally, the liver has some ill-defined hyperechoic nodules. These could be benign nodules. Consider a fine needle aspirate. Additionally, consider a fine needle aspirate of the isoechoic mass lesion, as I suspect this is a lipoma.

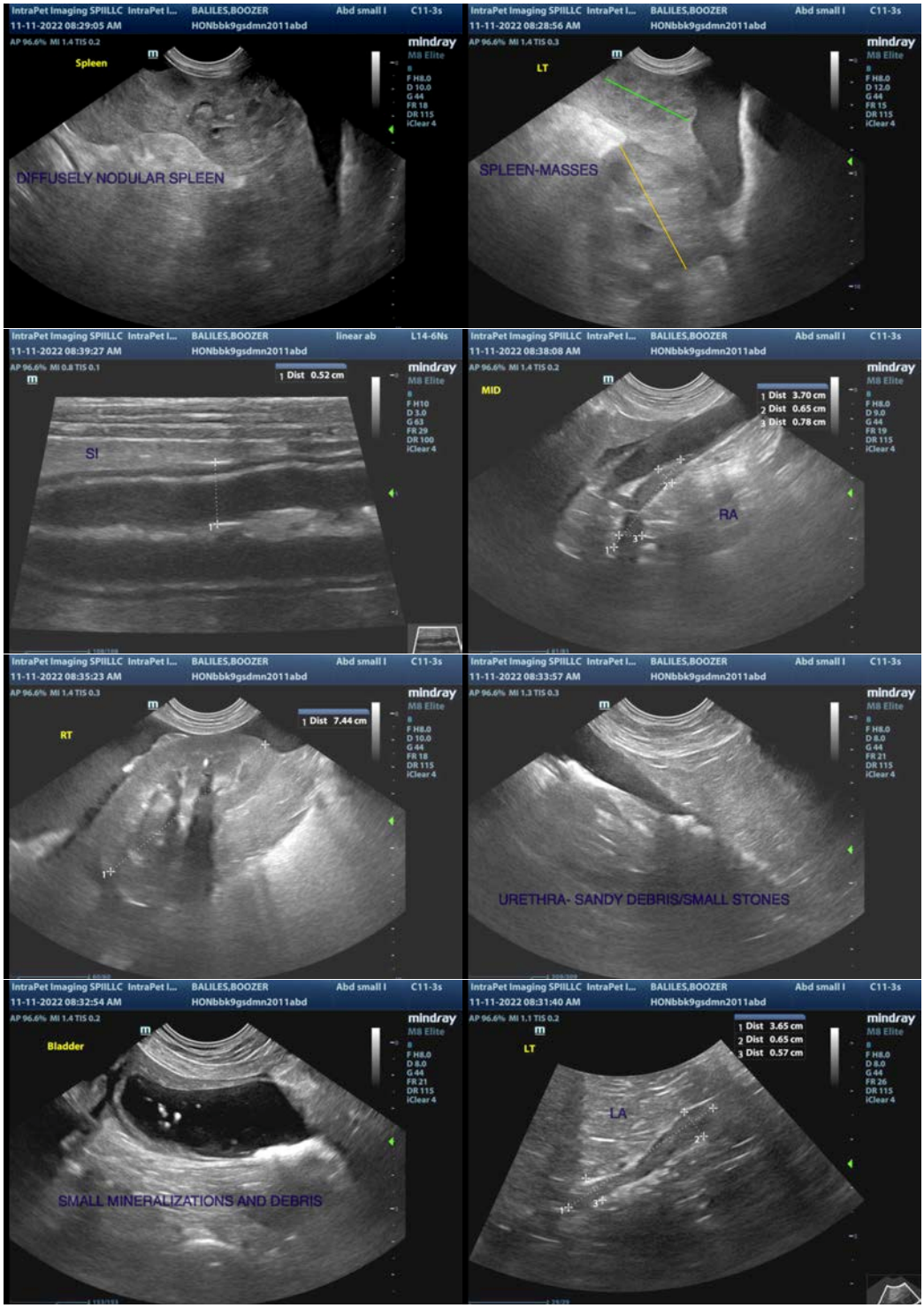
Additionally, there are some areas where the omentum appears somewhat irregular and nodular. This could be possibly concerning for omental metastasis, although this is not definitive.

If this patient currently has a hemoabdomen, then your options are splenectomy with visual evaluation of the abdomen, and biopsies of irregular tissue, or you could consider fine needle aspirates, but time may be of the essence and may not allow delay for cytology.

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

Additionally, there are stones in the urinary bladder, proximal urethra, and prostatic urethra. Recommend urinalysis and culture. If there is an infection present, there is the possibility that these could be struvite stones and dissolvable. Otherwise, correlate with abdominal radiographs and attempt retropulsion back into the urinary bladder and a cystotomy (as long as this patient is not currently obstructed, this may have to wait).




IntraPet Imaging SPIILLC IntraPet I... BALILES,BOOZER Abd small I C11-3s
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Spleen
DIFFUSELY NODULAR SPLEEN
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LT
SPLEEN-MASSES
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SI
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MID
1 Dist 3.70 cm
2 Dist 0.65 cm
3 Dist 0.78 cm
RA
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RT
1 Dist 7.44 cm
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URETHRA- SANDY DEBRIS/SMALL STONES
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Bladder
SMALL MINERALIZATIONS AND DEBRIS
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LT
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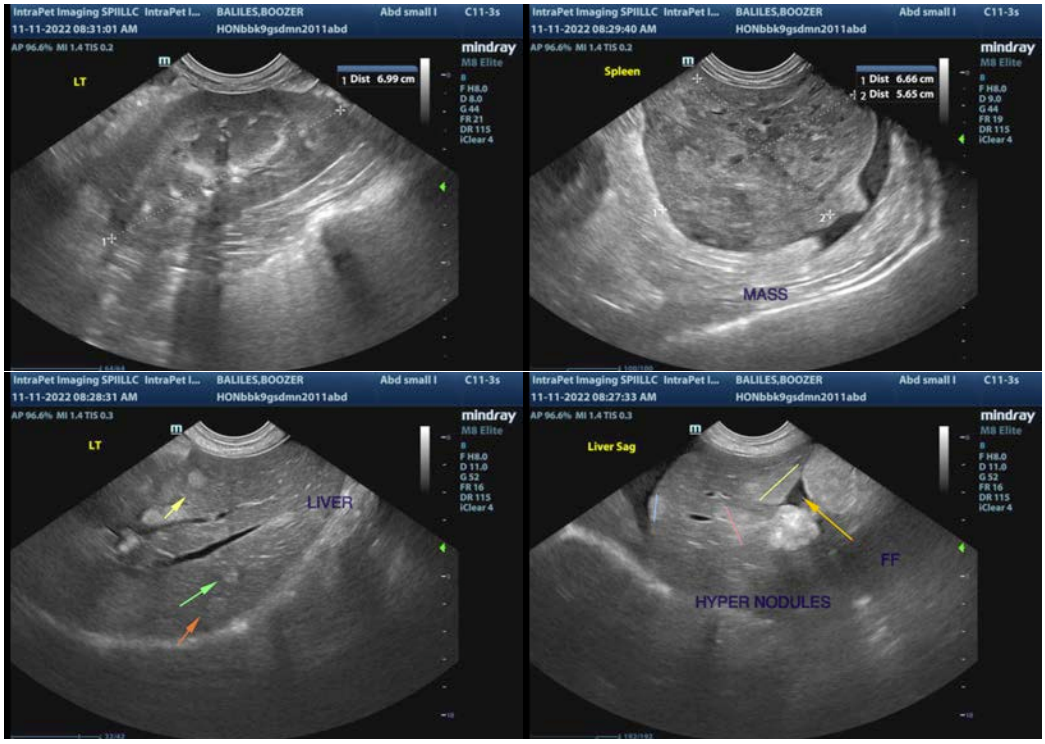
3 Dist 0.57 cm
LA



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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