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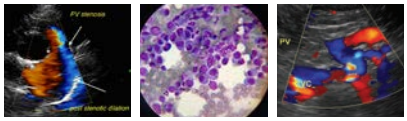

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**DATE**

12/30/21

**PATIENT**

Hugo Burghardt

**SPECIES**

Canine

**BREED**

Spaniel X

**SEX**

Neutered Male

**AGE**

8/3/07

**WEIGHT**

37.5 Pounds

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Rachel Brilhart RDMS

**HOSPITAL NAME**

Severna Park AH

**REFERRING VET**

Dr. Reichenbach

**INVOICE**

33864

## PRESENTING CLINICAL SIGNS

History: Presented for decreased appetite. P has gingival hyperplasia likely secondary to cyclosporine P is taking for dermatologic allergies, and O thought dental pain may be the reason for decreased appetite. On exam P was painful in the mid-abdomen.

Current Medications: Cyclosporine 50 mg PO SID for allergies chronically, Azithromycin 250 mg PO SID, Doxycycline 100 mg 1.5 tabs PO BID, Omeprazole 10 mg PO SID.
Lab Results: CBC/Chem 16: NSF.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: IV sedative.
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 normal in size and shape for this neutered male dog. The parenchyma is homogenous and the external margins are smooth. The prostatic urethra appears normal with no evidence of irregularity, invasion, mass effect or calculi.

The left kidney has a normal shape and size (6.04 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 (6.23 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. With scanning, the right kidney seems somewhat displaced caudally in the abdomen, but an obvious reason for this is not visualized.

### *Adrenal Glands*

The left adrenal gland is normal in size measuring 0.48 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 0.67 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. There is a somewhat indistinct hypoechoic intraparenchymal splenic nodule visualized measuring 1.04 cm x 1.22 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 is a somewhat ill-defined, isoechoic bulging mass effect deep on the left side of the liver, measuring 5.62 cm x 4.0 cm.

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. 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.

### *Other*

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

## ULTRASONOGRAPHIC FINDINGS

- Hypoechoic splenic nodule – There is a non-cavitated, hypoechoic splenic nodule visualized. Differentials include lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

- Heterogeneous liver with ill-defined isoechoic mass effect – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

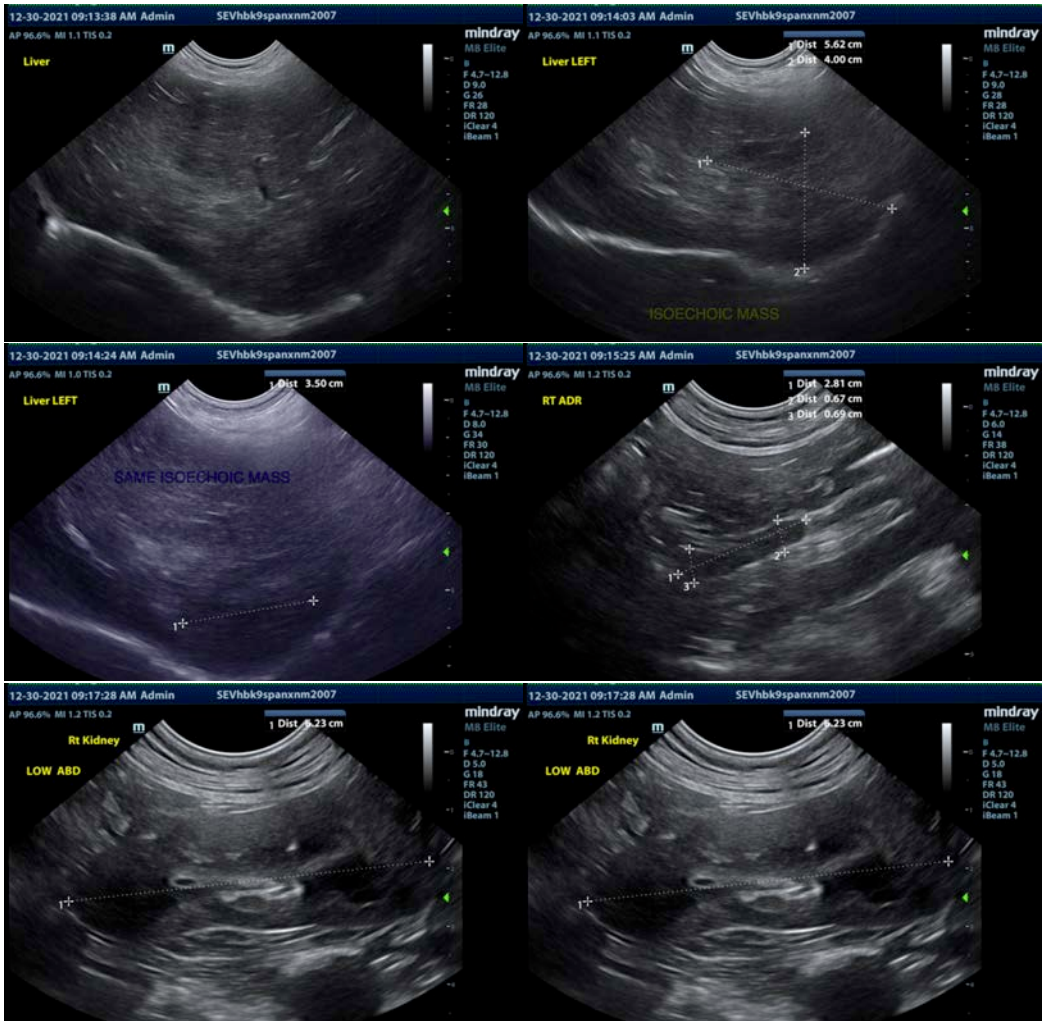
The lesions observed on today's scan were relatively subtle and unlikely to be a source of abdominal pain. Additionally, there is no evidence of hyperechoic mesentery surrounding these lesions, or anything to indicate inflammation.

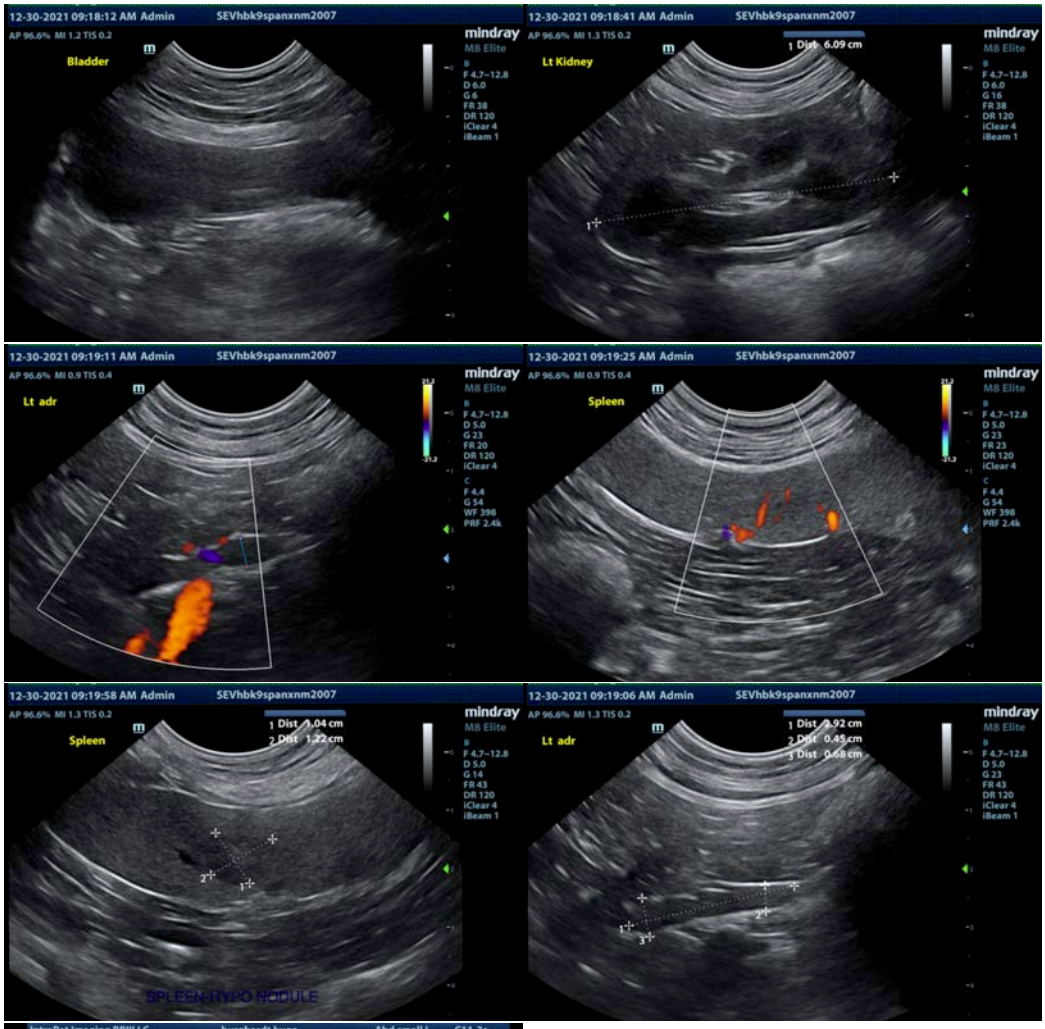
The splenic lesion is small and subtle. It could represent an early neoplastic lesion or a benign lesion. A fine needle aspirate could be performed, or at the least continued monitoring with ultrasound.

Additionally, the liver is somewhat heterogeneous. This is a non-specific finding. Correlate with blood work. If liver enzymes are normal, this is likely an age related change. There is an indistinct isoechoic mass effect visualized deep on the left side. Options for this mass include:

- Contrast CT scan to better delineate the mass and assess the feasibility of surgical removal.
- Consider serial monitoring of bloodwork and ultrasound, as this could represent a benign or cancerous lesion.

Consider other causes for abdominal pain. Recommend urinalysis and culture and careful spinal palpation. The sonographer notes that the right kidney appears displace caudally in the abdomen, but no cause for this is visualized. If a painful abdomen persists, consider testing for pancreatitis (which was not visualized on today's scan), and possibly the contrast CT scan.

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Lt adr
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Spleen
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Spleen
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2 Dist 1.22 cm
SPLEEN HYPO NODULE
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SEVhbk9spanxnm2007
Lt adr
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2 Dist 0.45 cm
3 Dist 0.68 cm
IntraPet Imaging RBIILLC
burghardt,hugo
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SEVhbk9spanxnm2007
Liver
LIVER/GB

**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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