**PATIENT**

Holly Brooks

**SPECIES**

Canine

**BREED**

Poodle X

**SEX**

Spayed Female

**AGE**

13 Years

**WEIGHT**

26 Pounds

**INTERPRETED BY**R. McKenzie Daniel, DVM,  
DABVP (Canine and Feline)**IMAGING  
PERFORMED BY**

Sarah Pender, CVT

**HOSPITAL NAME**

SVS Imaging QC

**REFERRING VET**

Dr. Casey Youngren

**INVOICE**

25181

**DATE**

9/3/21

**PRESENTING CLINICAL SIGNS**

O just obtained 3 days ago. Previous O passed away. History of bladder stones. Has been on Hill's c/d since 2014. New O reported she didnt want to eat her c/d past few days so gave her some of their dogs other food (blue buffalo). She did eat some of that for 24 hours. V and D started 9/2/21 in the am. O noted she was lethargic. Temp 104 F on presentation with abdominal tenderness.

Abnormal PE/Chem/CBC/UA Results: Fever (has decreased since being on IV fluids), abdominal tenderness, V/D. CPL normal, ALT (unreadable), ALP elevated 622, GGT elevated 29, T. Bil elevated 2.3. K+ mildly low 3.1. CBC: WBC 28.63, Moderate Neutrophilia, mild monocytosis Abdominal Rads: Loss of serosa detail in cranial upper quadrant. FB unlikely based on history.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and loss of corticomedullary symmetry and definition expected for the age of the patient. Minor medullary mineral present in both kidneys. Minor pyelectasia present in both kidneys. The right kidney measured 5.8 cm. The left kidney measured 5.5 cm.

The area of the aortic trifurcation was free of pathology.

**Adrenal Glands**

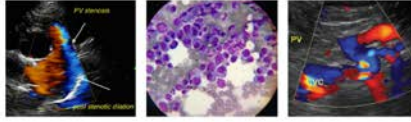
Both adrenal glands were within normal limits for size, but subjectively prominent. Primarily uniform parenchyma noted. A subtle, non-expansive, echogenic nodule was noted in the cranial left adrenal gland, measuring 0.52 cm in diameter. The left adrenal gland itself measured 2.5 cm length x 0.56 cm at the caudal pole. The right adrenal gland measured 2.5 cm length x 0.59 cm at the caudal pole.

**Spleen**

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Multifocal, well-defined, symmetrical, echogenic nodules were present throughout the cranial to caudal parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory or neoplastic changes were not noted. The echogenic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas.

**Liver**

The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder exhibited generalized distention with moderate non-dependent to mildly organized echogenic luminal debris extending into the mildly dilated cystic biliary duct.

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***Gastrointestinal***

The stomach presented wall thickening secondary to echogenic mucosa hypertrophy. Intact wall layering was maintained and distinct. Minor retained anechoic fluid and minor echogenic non-shadowing ingesta noted. Gastric body wall measured 0.40 cm.

The duodenum exhibited intact yet subjective prominent wall layering with minor duodenal luminal fluid. Duodenum wall measured 0.35 cm.

Normal visible colon wall layers were present with apparent formed feces in lumen.

***Pancreas***

Diffuse enlargement of the pancreas with ill-defined, hypoechoic to heterogeneous parenchyma and asymmetrical contour was present, primarily in the pancreas base and right limb. The surrounding omental fat around the enlarged to hypoechoic pancreas was echogenic indicative of reactive change, adhesions, focal peritonitis, or saponification. Mild localized free fluid was present around the abnormal pancreas.

***Free Abdomen***

Mid to cranial abdominal increased omental echogenicity noted with small pockets of scant, primarily perihepatic to pericholecystic free fluid. No overt lymphadenopathy.

**PRIMARY FINDINGS**

- Pancreatitis – subjective moderate, active
- Acute hepatopathy
- Distended gallbladder with non-dependent to mildly organized luminal debris – suggestive of atypical mucocele.
- Mid to cranial abdominal peritonitis
- Gastroduodenitis with gastric stasis

**SECONDARY FINDINGS**

- Non-specific, non-expansive cranial left adrenal nodule – suspect adenoma.
- Benign splenic nodules

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The clinical signs in this patient are suspected to be multifactorial in origin, secondary to pancreatitis. Distended gallbladder consistent with atypical mucocele and acute hepatopathy. Initially, aggressive medical therapy for pancreatitis including analgesic, broad-spectrum antibiotics, IV fluids +/- plasma expanders and as-needed gastrointestinal support recommended. However, close monitoring for evidence of increasing cholestasis and hepatic enzyme elevations with potential recheck sonogram is essential. Coagulation panel recommended. Potentially, laparotomy with expectation toward cholecystectomy, hepatic +/- pancreatic biopsies may be required in this case pending clinical response to therapy and further monitoring.



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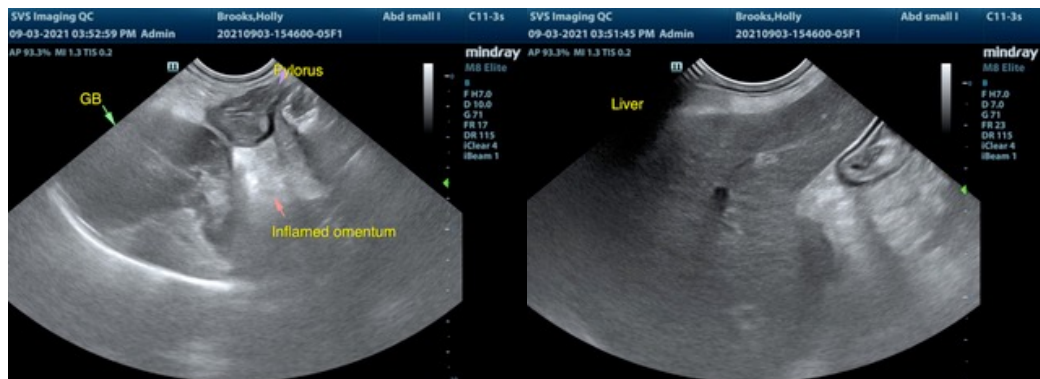
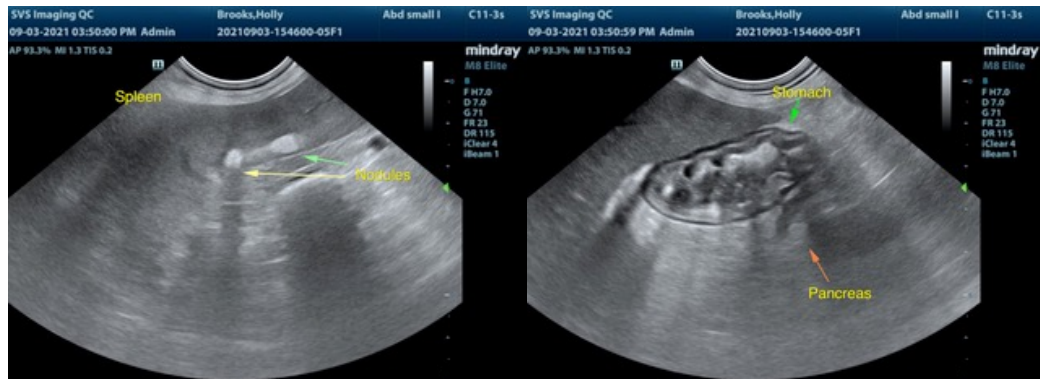
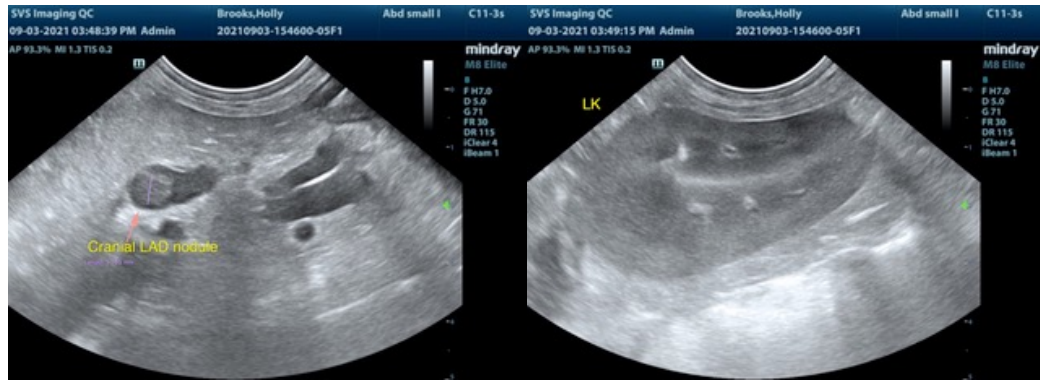
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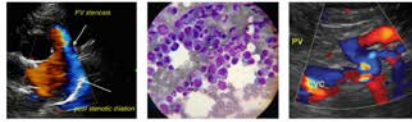
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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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info@SonoPath.com

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