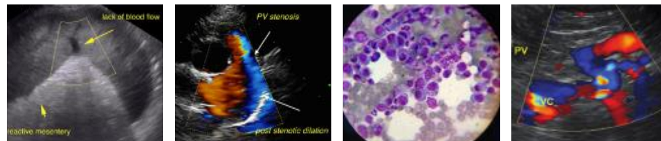


SonoPath.com™
1-800-838-4268 info@sonopath.com

**PATIENT**

Hakuna Guzman

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

14 years, 9 mos

**WEIGHT**

14 bs

**INTERPRETED BY**

Andrea Nicastro,
DVM, Diplomate ACVIM
(*Small Animal Internal Medicine*)

**IMAGING PERFORMED BY**

Amanda Lacey-Crook
SDEP Cert. Sonographer

**HOSPITAL NAME**

Rivers Edge Pet MC

**REFERRING VET**

Dr. Bridget Hayes

**INVOICE**

10563

**DATE**

3/16/22

## PRESENTING CLINICAL SIGNS

History: Chronic allergies and overgrooming. Stopped eating canned food recently, but will still eat dry. Vomiting after eating x 1 week. Mild weight loss. Normal activity. Basaglar insulin pen 2.5 U BID, not given today or yesterday

Abnormal PE/Chem/CBC/UA Results: Labs: BG = 460 (no insulin x 24 hours) CBC = normal. Radiographs: Gassy stomach and intestines.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder is moderately distended with mostly anechoic urine. The wall is normal in thickness with a smooth mucosal surface. No cystic calculi are observed. The region of the trigone is normal.

The left kidney is normal size (3.87 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (4.54 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

### *Adrenal Glands*

The left adrenal gland is normal size (0.87 cm length; 0.42 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is normal size (0.91 cm length; 0.46 cm width). Normal shape and glandular echogenicity. The phrenicoabdominal vein and surrounding vasculature are normal.

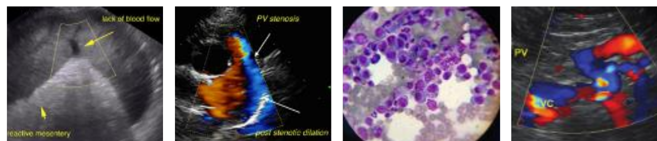
### *Spleen*

The spleen is normal in size (0.60 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

### *Liver*

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and homogenous in appearance. No distinct focal lesions are observed. Intrahepatic biliary stones are visualized. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately 1: 1.

The gall bladder is moderately distended. The wall is slightly thickened (up to 0.19 cm), and hyperechoic to mineralized in appearance. Luminal contents are mostly anechoic. The cystic and



SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Hakuna Guzman

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

14 years, 9 mos

**WEIGHT**

14 bs

**INTERPRETED BY**

Andrea Nicastro,
DVM, Diplomate ACVIM
(*Small Animal Internal Medicine*)

**IMAGING PERFORMED BY**

Amanda Lacey-Crook
SDEP Cert. Sonographer

**HOSPITAL NAME**

Rivers Edge Pet MC

**REFERRING VET**

Dr. Bridget Hayes

**INVOICE**

10563

**DATE**

3/16/22

common bile ducts are visible, but not overtly dilated. The duodenal papilla is visible and is normal in size (0.37 cm in width).

### *Gastrointestinal*

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall is normal to mildly thickened (up to 0.28 cm), with a normal layering pattern and appropriate mural detail. There is disruption in the normal 1:3 muscularis: mucosal ratio in most segments. Discreet masses are not identified. The ileocecal colic junction and colonic wall are normal. No obstructive disease is noted.

### *Pancreas*

The left limb appears normal in size and is largely isoechoic relative to surrounding omental fat. The right limb is prominent with slightly irregular peripheral contours. The parenchyma is heterogenous/mottled in appearance. A 0.50 cm hypoechoic nodule is observed. The pancreatic duct is visible, but not overtly dilated.

### *Free Abdomen*

There is no evidence of free fluid. A few prominent colic lymph nodes are visualized, the largest measuring 1.15 cm in length.

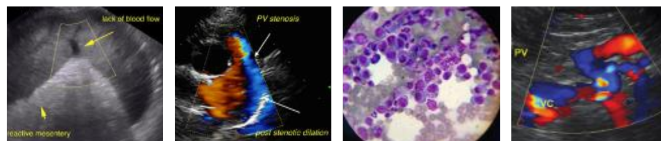
## ULTRASONOGRAPHIC FINDINGS

### Primary Findings

- Bowel pattern consistent with inflammatory bowel disease with some potential for emerging lymphoma. However, neoplasia is considered less likely at this time.
- The pancreatic changes are consistent with age-related remodeling/fibrosis, with possible concurrent low-grade pancreatitis. The pancreatic nodule is most consistent with a benign nodular hyperplasia with a lower possibility of emerging neoplasia.
- The gall bladder wall changes are suggestive of cholecystitis. The mineralization (aka “porcelain” gall bladder) is associated with cholecystitis, but in rare instances, can be seen with biliary carcinoma.
- Given the sonographic changes, “triaditis” is a consideration for this patient.

### Secondary Findings

- The lymph node changes are most consistent with reactive lymphadenitis or lymphoid hyperplasia.
- Bilateral nonspecific age-related renal changes
- Intrahepatic biliary stones – incidental



SonoPath.com
1-800-838-4268 info@sonopath.com

**PATIENT**

Hakuna Guzman

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

14 years, 9 mos

**WEIGHT**

14 bs

**INTERPRETED BY**

Andrea Nicastro,
DVM, Diplomate ACVIM
(*Small Animal Internal Medicine*)

**IMAGING PERFORMED BY**

Amanda Lacey-Crook
SDEP Cert. Sonographer

**HOSPITAL NAME**

Rivers Edge Pet MC

**REFERRING VET**

Dr. Bridget Hayes

**INVOICE**

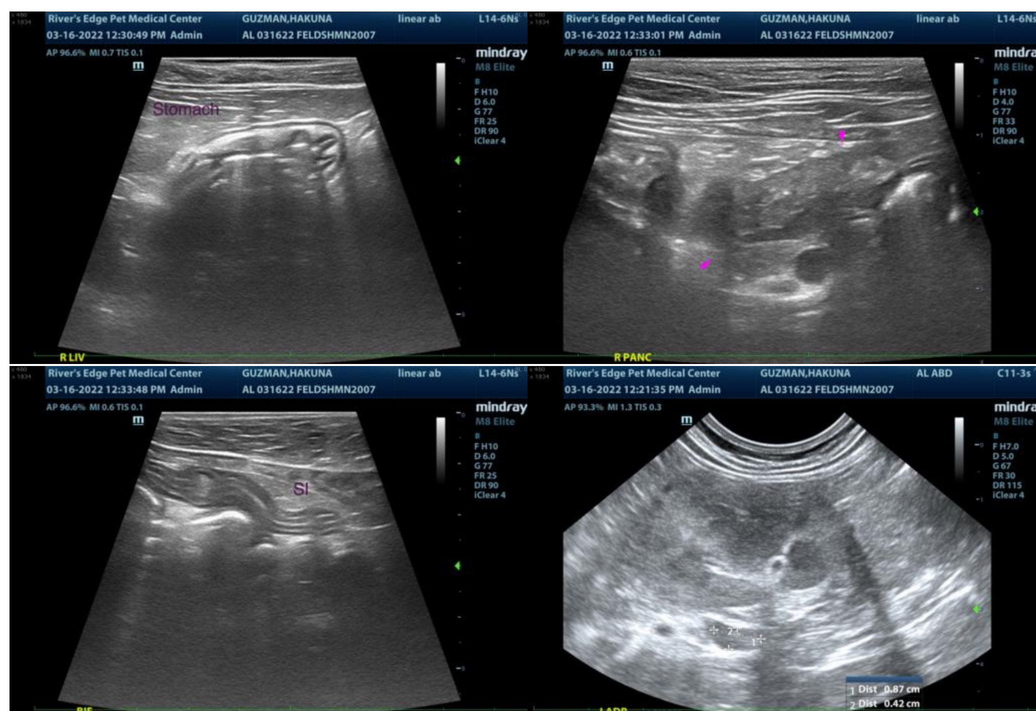
10563

**DATE**

3/16/22

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

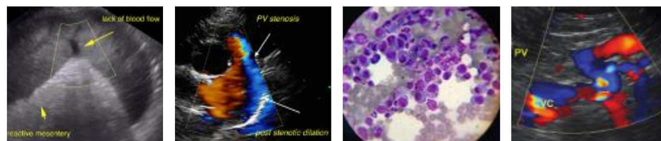
- Malabsorption panel (i.e., serum cobalamin, folate, TLI and PLI)
- Fecal evaluation for ova and Giardia
- A urinalysis is recommended to assess for the presence of ketonuria. Consider a urine culture and sensitivity, if indicated.
- Supportive care for “triaditis” is recommended, including gastric protectants, antiemetics, broad-spectrum antibiotics (if indicated), and fluid therapy, if the patient is dehydrated and/or ketotic.
- Three-view thoracic radiographs also should be considered to assess cardiopulmonary status.
- Ultimately, gastrointestinal+/- pancreatic biopsies may be necessary to get a definitive diagnosis.



# SonoPath

*Clinical Sonography & Telecytology*

EDUCATIONAL TELECONSULTATION SERVICES™





SonoPath.com™

1-800-838-4268 info@sonopath.com


**PATIENT**

Hakuna Guzman

**SPECIES**

Feline

**BREED**

DSH

**SEX**

Neutered Male

**AGE**

14 years, 9 mos

**WEIGHT**

14 bs

**INTERPRETED BY**

Andrea Nicastro,
DVM, Diplomate ACVIM
(*Small Animal Internal Medicine*)

**IMAGING PERFORMED BY**

Amanda Lacey-Crook
SDEP Cert. Sonographer

**HOSPITAL NAME**

Rivers Edge Pet MC

**REFERRING VET**

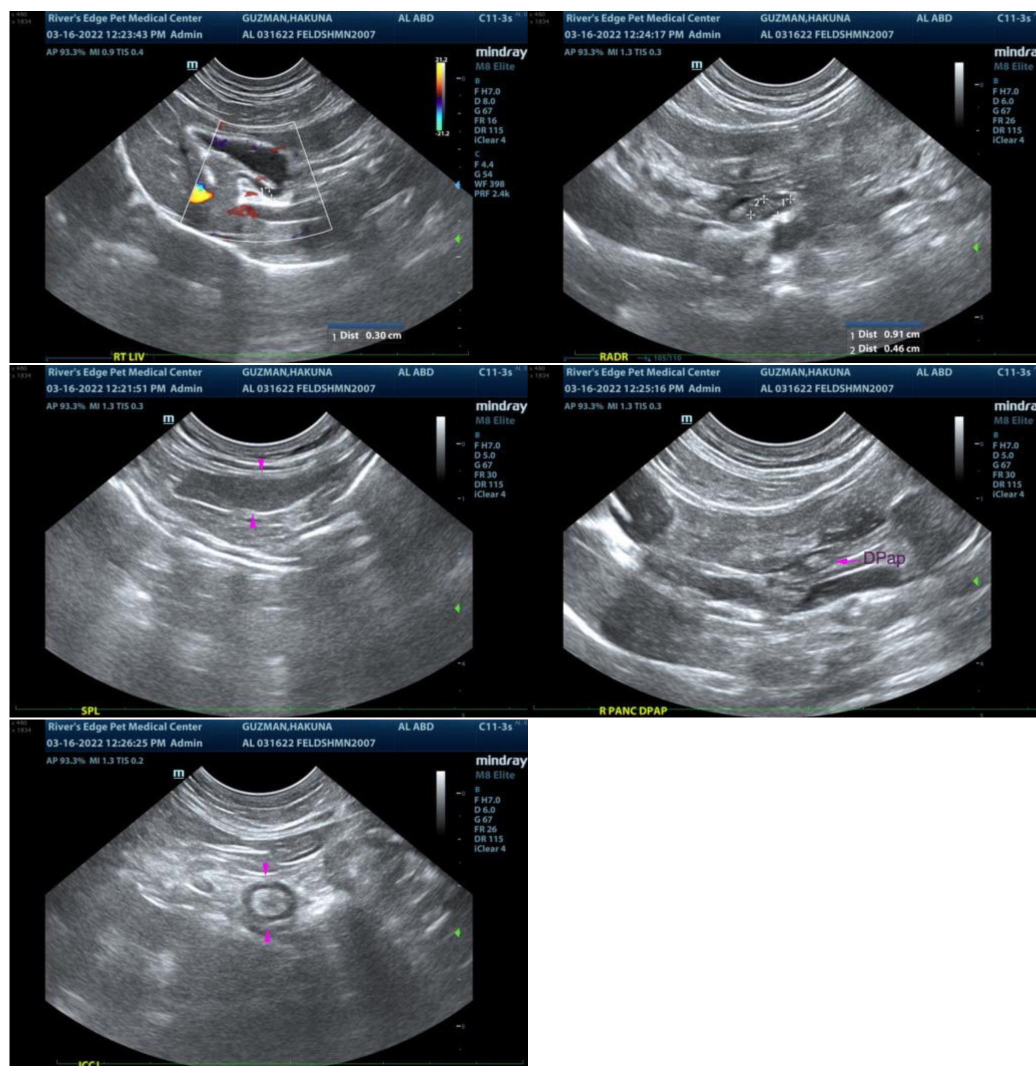
Dr. Bridget Hayes

**INVOICE**

10563

**DATE**

3/16/22




**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.


**Andrea Nicastro**, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com