

**DATE PRESENTING CLINICAL SIGNS**

8.5.2022 7/18/22 presented for not being as excited and usual about her meals and some soft stools. Hx of liver enz elevation and PU/PD in April of this year, 30 d of Denamarin was given, no change

PATIENT

Sally Zill Current Medications: None at this time.
 Lab Results: 7/18/22: ALT 303, ALP 559, AST 64, GGT 14. 4/14/22: Low dose Des Suppr test WNL.
 3/22/22: ALT 151, ALP 392, AST 39, GGT 8.
 Date of Previous IntraPet Ultrasound: No previous.

SPECIES

Canine Sedation: Not required to complete full diagnostic ultrasound.
 Stat Report: Not requested.
 Imaging Performed By: Andi Parkinson, BS, RDMS.

BREED

Labrador Mix

SEX

Spayed Female

AGE

9/29/2008

WEIGHT

60 lbs

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**Urinary System**

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended. A scant amount of suspended, echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The **left kidney** is normal size (5.91 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The **right kidney** is normal size (6.35 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

INTERPRETED BY

Andrea Nicastro, DMV,
 Diplomate DACVIM
 (Small Animal
 Internal Medicine)

Adrenal Glands

The **left adrenal gland** is enlarged (0.66 cm at cranial pole) (0.56 cm at caudal pole) (2.43 cm in length with an irregular shape. Two masses are observed, one at the cranial pole and one at the caudal pole. The cranial mass measures 2.82 x 2.57. The caudal mass measures 2.55 x 2.33. Both masses are heterogenous and cause capsular expansion.

HOSPITAL NAME

Timonium Animal

The **right adrenal gland** is normal in size with a normal shape. A 0.91 x 0.71 cm hypoechoic nodule is observed at the cranial pole. Glandular echogenicity and detail at the caudal pole are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

REFERRING VET

Hospital Dr. Brand

Spleen

The **spleen** is normal in size (1.67 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A few, small, ill-defined myelolipomas are observed in the region of the hilus. Splenic vasculature is normal.

INVOICE

11350

Liver

The **liver** is subjectively enlarged with swollen, irregular peripheral contours. A >9.60 cm heterogenous mass is observed on the right side. The mass causes capsular expansion. The mesentery effacing the serosal surface of the mass is hyperechoic. The remaining hepatic parenchyma is mildly heterogenous in appearance. Hepatic vasculature and intrahepatic biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** lumen is moderately distended. The wall is thin and smooth. A small to moderate amount of aggregated, echogenic, partially dependent to suspended debris/sludge is observed within the lumen. The cystic and common bile ducts are normal/not seen.

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 thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

Pancreas

The right limb of the **pancreas** is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

There is no evidence of free fluid. The abdominal **lymph nodes** are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Large right hepatic mass. Neoplasia (i.e., adenoma, adenocarcinoma) is considered likely with a low possibility of a benign process. Regional peritonitis is present. The diffuse hepatic parenchymal changes trend toward the benign (i.e., nodular hyperplasia and/or vacuolar hepatopathy) although metastatic disease cannot be completely excluded.
- Left adrenal masses. Neoplasia (i.e., adenoma, adenocarcinoma, pheochromocytoma) is suspected. However, excessive nodular hyperplasia cannot be completely excluded. The right adrenal nodule trends toward the benign (i.e., nodular hyperplasia) with a lower possibility of an emerging tumor.

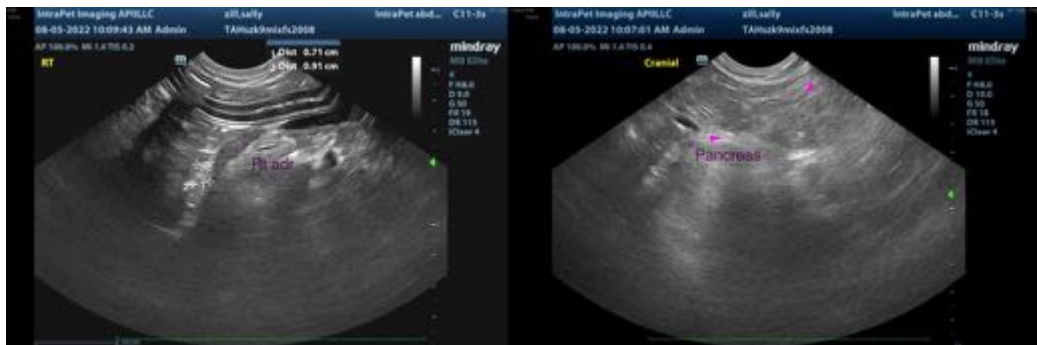
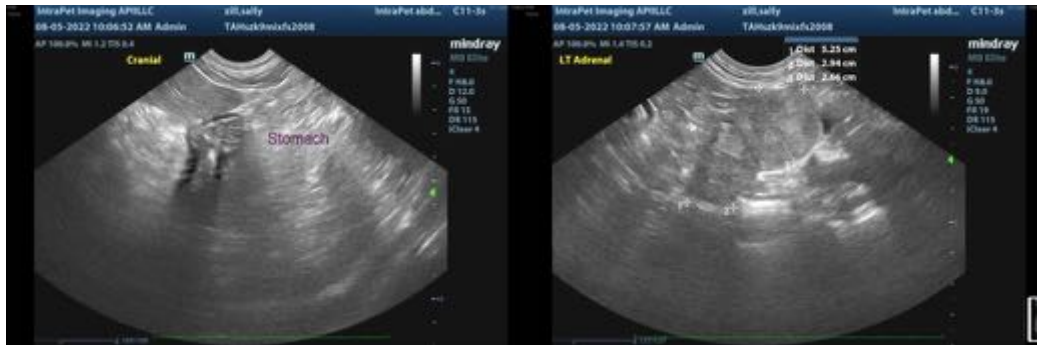
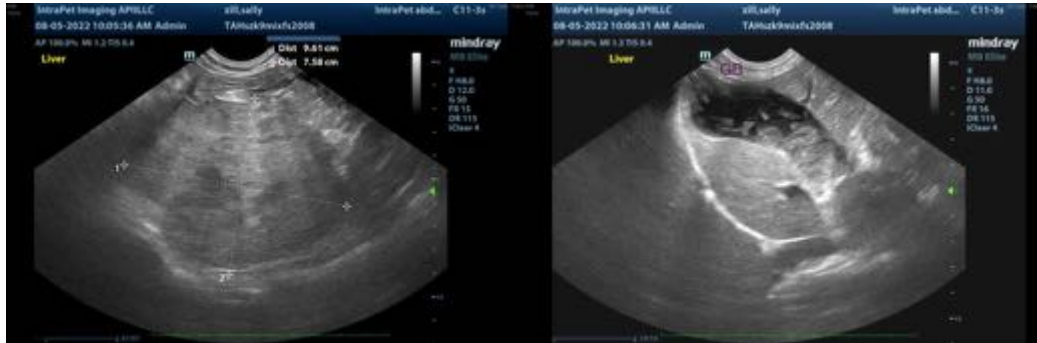
Secondary Findings

- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Three-view thoracic radiographs are recommended to assess for pulmonary metastases.

If an aggressive approach is desired, consider referral to a board-certified surgeon to discuss hepatic mass removal +/- a left adrenalectomy. An abdominal CT scan would be useful in presurgical planning. If surgery is not pursued, palliative/symptomatic care is recommended.



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, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)
info@SonoPath.com