

**DATE PRESENTING CLINICAL SIGNS**

4/18/22

P had a liver lobectomy to remove a tumor (biopsy diagnosed as carcinoma, massive type w/ clean margins) on 11/10/2020. Also had biopsy of remaining liver – which showed nodular hyperplasia.

**PATIENT**

P currently came in d/t PU/PD; is otherwise doing well

Gidget Saville

Current Medications: None.

Lab Results: Increased ALT, ALKP and GGT. USG 1.010, proteinuria 2+.

Date of Previous IntraPet Ultrasound: 10/11/2021 and 10/29/2020.

**SPECIES**

ALP 608, ALT 206, GGT 13, precision PSL 289, CBC and T4 WNL.

Canine

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

Imaging Performed By: Rachel Brillhart, RDMS.

Corgi

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

Female, spayed

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface in the region of the apex is slightly irregular. The bladder lumen is moderately distended with anechoic urine. 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.

**AGE**

5/1/2008

The left kidney is normal size (5.37 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.

**WEIGHT**

There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

22.8 lbs.

The right kidney is normal size (5.57 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. A 0.31 cm cortical cyst is observed at the caudal pole. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**INTERPRETED BY**

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

**Adrenal Glands**

The left adrenal gland is mildly enlarged (0.57 cm at cranial pole) (0.95 cm at caudal pole) (2.25 cm in length) with a prominent caudal pole. Glandular echogenicity and detail at the cranial aspect are unremarkable. At the caudal aspect, the parenchyma is slightly heterogeneous with mild loss of glandular detail. Surrounding vasculature appears normal.

**HOSPITAL NAME**

Charm City VH

The right adrenal gland is mildly enlarged (0.63 cm at cranial pole) (0.79 cm at caudal pole) (1.71 cm in length) with a slightly irregular shape. Glandular echogenicity and detail at the cranial pole are normal. The caudal pole is slightly swollen/bulging and mildly hypoechoic with some loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

**REFERRING VET**

Dr. Karbonik

**Spleen**

The spleen is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is diffusely mottled with ill-defined varying sized hypoechoic nodules/areas. A 1.22 cm hypoechoic to heterogeneous nodule is observed near the lateral aspect. A similar appearing nodule measuring 1.05 cm is observed at the caudal aspect. A tiny hyperechoic nodule is also seen. Splenic vasculature is normal with no evidence of thrombosis.

**INVOICE**

13221

**Liver**

The liver is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature and biliary tracts are of normal volume with no evidence of congestion. The

gallbladder is of normal contours and contains some dependent echogenic debris. The wall is normal in thickness. No choleliths are observed. The cystic and common bile ducts are normal.

### ***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. No obstructive disease is noted.

### ***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***

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

### ***Other***

A brief echocardiogram reveals no evidence of pericardial effusion or obvious right atrial/auricular mass.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

- Bilateral adrenomegaly. The adrenal parenchymal changes are most consistent with hyperplasia. However, emerging neoplasia, particularly in the caudal aspect of the left adrenal gland cannot be completely excluded.
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- The splenic parenchymal changes could be consistent with emerging neoplasia (i.e., round cell tumor). Alternatively, a benign process such as extramedullary hematopoiesis, lymphoid hyperplasia or multifocal inflammatory disease cannot be excluded.

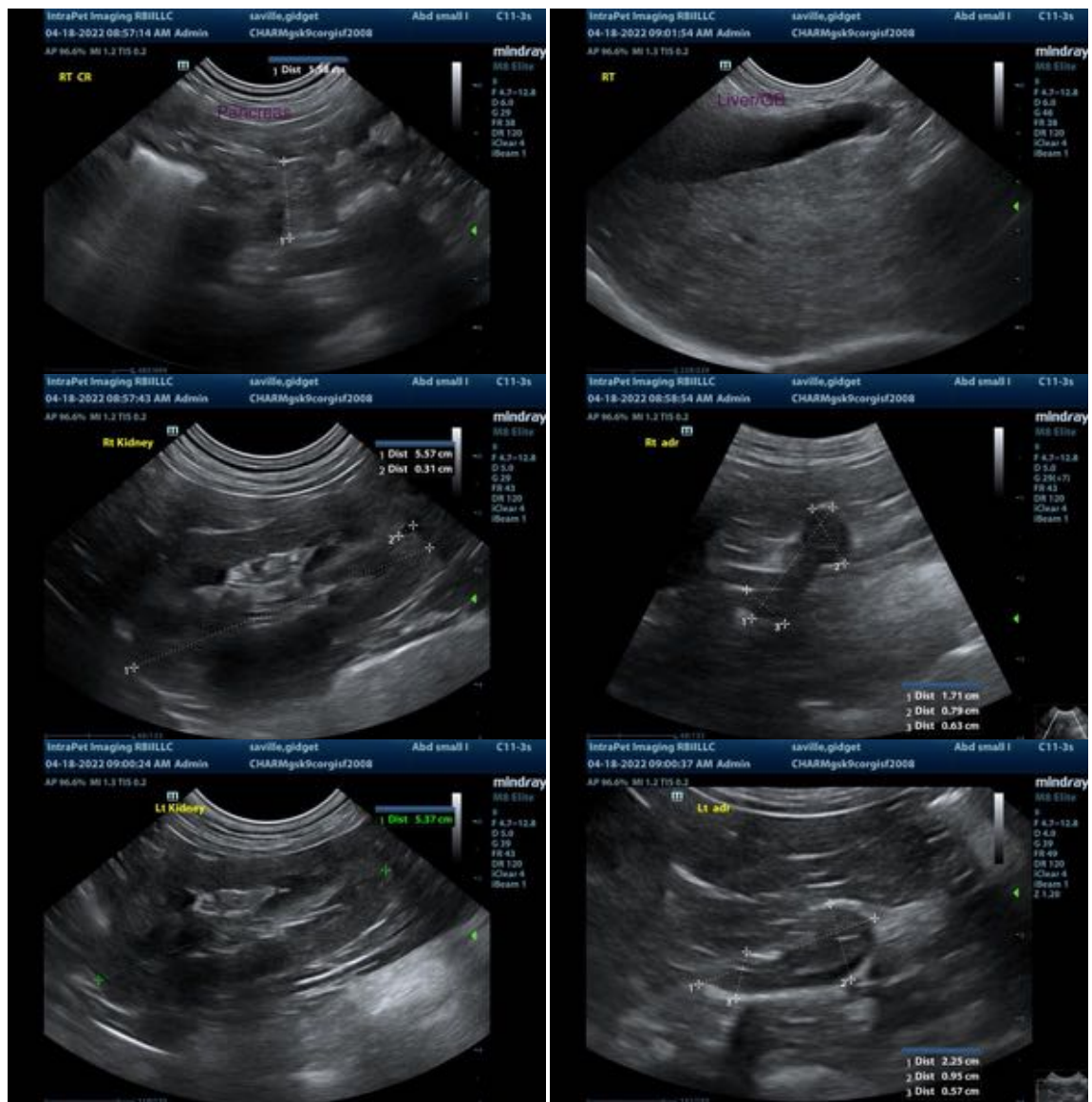
### **Secondary Findings:**

- 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**

- Regarding the patient's clinical signs and adrenal findings, consider further testing for Cushing's disease (i.e., low-dose Dexamethasone suppression test or ACTH stimulation test).
- A UPC and baseline blood pressure measurement should also be considered.

- Given the PU/PD, a urine culture and sensitivity could also be considered to assess for occult pyelonephritis.
- Regarding the splenic changes, consider a fine needle aspirate (if clotting status is appropriate), with particular attention to the heterogeneous nodules.
- Also consider three-view thoracic radiographs to assess cardiopulmonary status.





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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