



**PATIENT PRESENTING CLINICAL SIGNS**

Ruby Fetridge History: Came in for a routine wellness. Feeling fine but had some abnormalities on routine lab-work.

**SPECIES** Clinical Exam Findings: (Records emailed). BUN 33. GGT 19. Totalbili 0.6. CBC unremarkable. T4 normal. 4dx negative.

Canine Abnormal lab-work values: Records emailed.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED** *Urinary System*

Goldendoodle The urinary bladder wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. Luminal contents are anechoic. No cystic calculi are observed. The region of the trigone and the proximal urethra, visible to a depth of 2 cm, are normal.

**SEX**

Spayed Female The left kidney is normal in size (4.22 cm in length) with a normal shape, architecture and 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.

**AGE**

1/31/2015 The right kidney is normal in size (4.58 cm in length) with a normal shape, architecture and 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.

**WEIGHT**

23.6 lbs

*Adrenal Glands*

The left adrenal gland is normal in size (0.43 cm at cranial pole) (0.49 cm at caudal pole) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**INTERPRETED BY**

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

The right adrenal gland is in normal size (1.29 cm at cranial pole) (0.53 cm at caudal pole) with a normal shape and homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

**IMAGING PERFORMED BY**

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Diplomate ACVIM (*Small Animal Internal Medicine*)

*Spleen*

The spleen is normal in size (1.04 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A 0.81 cm ill-defined hypoechoic nodule is observed near the lateral aspect, approximately mid-spleen. Splenic vasculature is normal.

**HOSPITAL NAME**

Salt Marsh AH

*Liver*

The liver is normal to slightly prominent in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic-to-isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The portal vein to caudal vena cava ratio is approximately 1: 1.

**REFERRING VET**

Christie Wiles

The gall bladder 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.

**INVOICE** *Gastrointestinal*

12525

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is mildly distended with ingesta. 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

**DATE**

3.27.23

wall is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The ileocecolic junction and colonic wall are normal. The colonic lumen contains shadowing fecal material. There is no evidence of an obstructive pattern.

#### ***Pancreas***

The right limb of the pancreas is normal in size with normal curvilinear peripheral contours. The parenchyma is largely hyperechoic 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 obvious evidence of free fluid. The abdominal lymph nodes are normal/not visible.

#### ***Other***

A brief echocardiogram reveals no obvious evidence of pericardial effusion.

### **ULTRASONOGRAPHIC FINDINGS**

#### **Primary Findings**

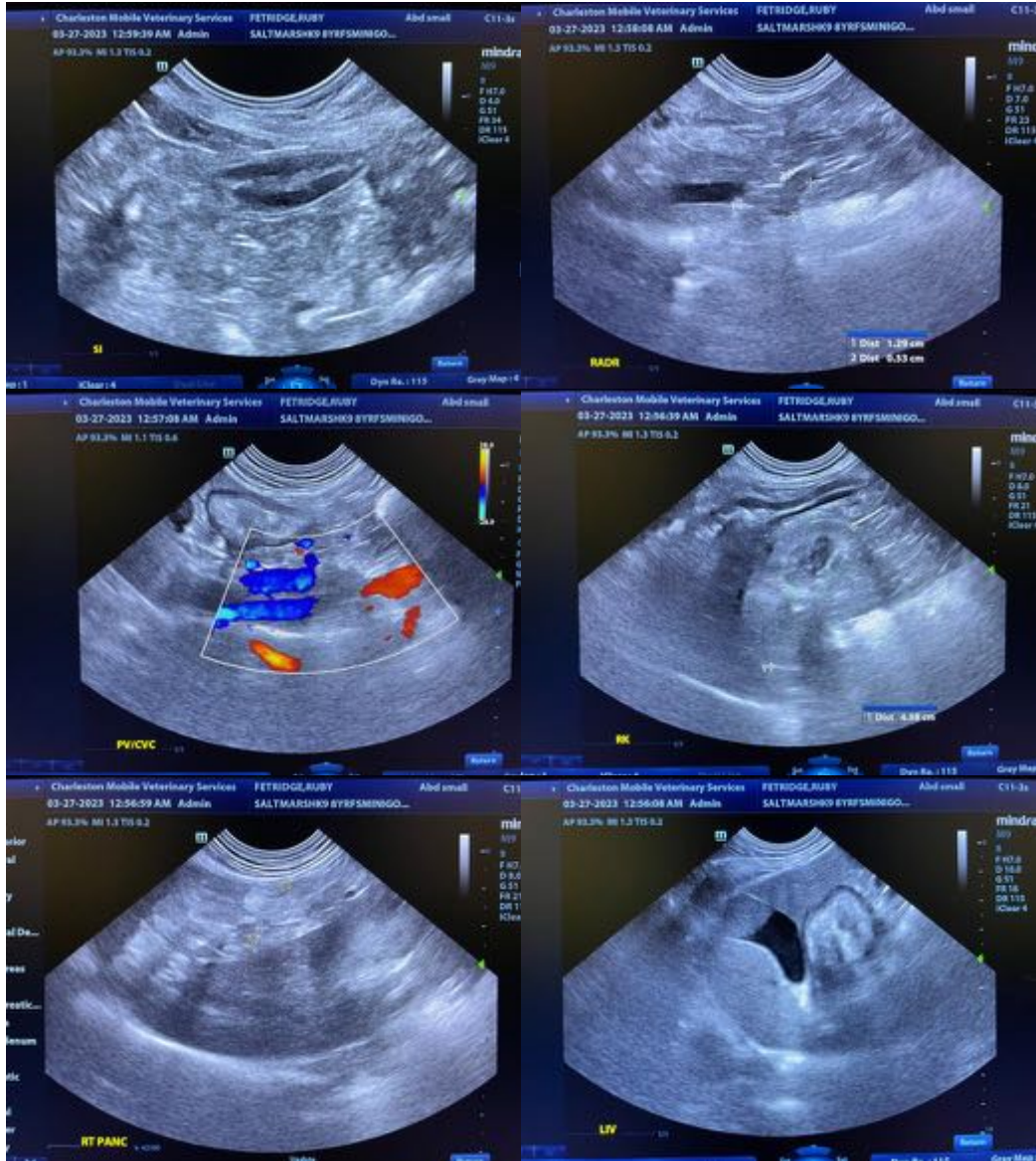
- The hepatic parenchymal changes are most consistent with a benign hepatopathy. Vacuolar hepatopathy (i.e., idiopathic/endocrine) is the top differential. Given the normal ALT, inflammatory disease is considered less likely. Infiltrative neoplasia is also considered unlikely given the sonographic appearance and the lack of clinical signs.
- The splenic nodule could be consistent with a benign process (i.e., a focal area of lymphoid hyperplasia, extramedullary hematopoiesis or similar). Alternatively, an emerging tumor is possible.

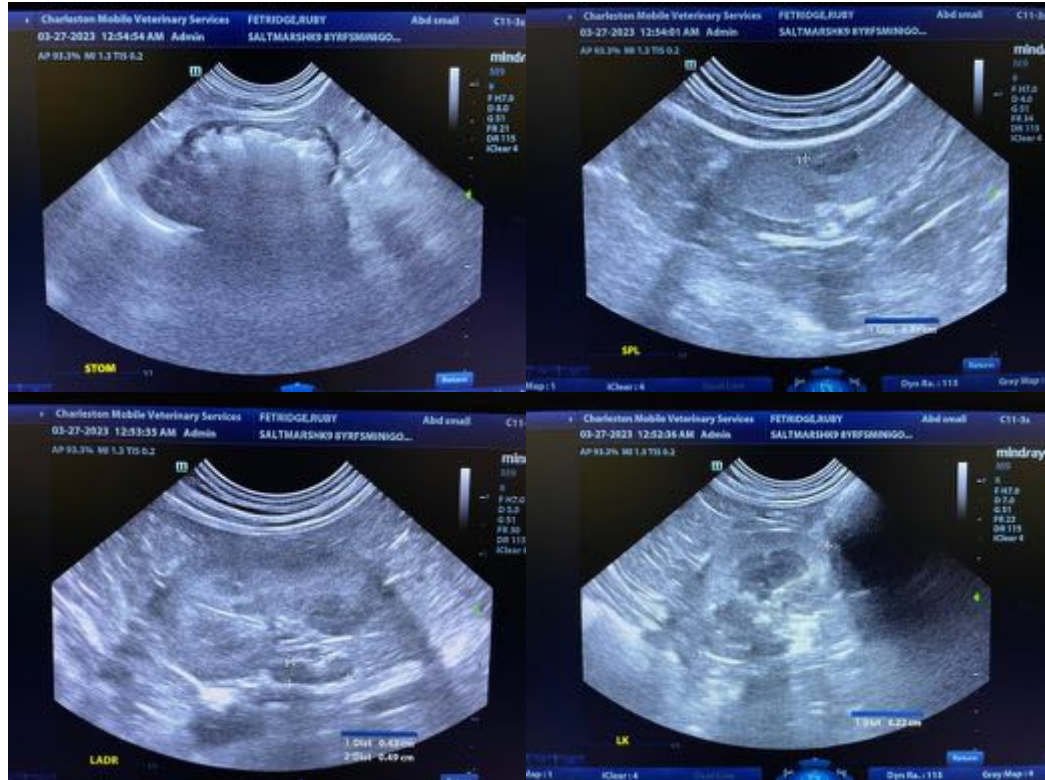
#### **Secondary Findings**

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

### **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

- Repeat bloodwork is recommended in three months to assess for further changes in the patient's liver and kidney values. If values continue to increase, further work-up may be warranted.
- Regarding the splenic nodule, a fine-needle aspirate can be considered (if clotting status is appropriate). If aspiration is not pursued at this time, consider a repeat ultrasound in 1-2 months to assess for growth.





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.

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