

**DATE PRESENTING CLINICAL SIGNS**

3/21/23

Possible nausea for ~2months- grass eating. Began vomiting dinner 3/8/23. Diarrhea for 10 days- was soft and mucousy, now liquid. Has vomited about 5 times in the last 10 days. One vomit episode had pieces of plastic toy in it. PE=WNL.

**PATIENT**

Jelly Rose

Current Medications: Metronidazole 250mg BID x 7 days

Cerenia 24mg SID x 2 days, Fortiflora x 7 days

Lab Results: 3/10/23- Alk Phosphatase=153, GGT=18

Radiographs: 3/10/23- radiographs NSF- gas. 3/20/23- radiographs- gas pattern has not moved.

**SPECIES**

Canine

Date of Previous IntraPet Ultrasound: No previous.

Sedation: Not required to complete full diagnostic ultrasound.

Stat Report: Not requested.

**BREED**

ACD mix

Imaging Performed By: Rachel Brillhart, RDMS.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****SEX**

Female, spayed

**Urinary System**

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 is normal.

**AGE**

11/7/2010

The left kidney is normal in size (5.10 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is minimal loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

**WEIGHT**

26.2 lbs.

The right kidney is normal size (5.31 cm in length) with a normal shape, smooth peripheral margins and normal internal architecture. There is minimal loss of corticomedullary distinction. Several hyperechoic shadowing diverticular foci are observed. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

**INTERPRETED BY**

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

**Adrenal Glands**

One still image of the left adrenal gland is available for interpretation. The left adrenal gland is enlarged (0.67 cm at cranial pole) (0.95 cm at caudal pole) (2.54 cm in length) with a slightly irregular shape. The parenchyma appears mildly heterogeneous with some loss of glandular detail.

**HOSPITAL NAME**

Fallston VC

The right adrenal gland is mildly enlarged (1.10 cm at cranial pole) (0.75 cm at caudal pole) (2.25 cm in length) with a slightly irregular shape. A 1.00 x 0.93 cm hyperechoic nodule is observed at the cranial pole. The glandular echogenicity and detail at the caudal pole appear normal. Surrounding vasculature appears normal.

**REFERRING VET**

Dr. Harvey

**Spleen**

The spleen is normal in size (1.41 cm in width at the level of the hilus) with slightly irregular peripheral contours. The parenchyma is subtly mottled in appearance. A few ill-defined hyperechoic nodules are visualized, the largest measuring 1.43 cm in diameter (lateral aspect). Splenic vasculature is normal with no evidence of thrombosis.

**INVOICE**

14771

**Liver**

The liver is subjectively enlarged with irregular peripheral contours. Numerous varying sized heterogeneous masses are observed throughout the organ, the largest measuring >7 cm. A few of the lesions are cavitated. Vascular is of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thickened (up to 0.30 cm), hyperechoic and slightly irregular. A small amount of suspended echogenic debris 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. 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 mesentery in the cranial abdomen is hyperechoic. A moderate amount of free fluid is present. The abdominal lymph nodes are normal/not visible.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings:**

- Numerous hepatic masses. Neoplasia (i.e., round cell tumor, adenocarcinoma, sarcoma) is considered likely with a lower possibility of a multifocal inflammatory process or other hepatopathy.
- The cranial peritonitis and ascites are likely secondary to hepatic pathology.

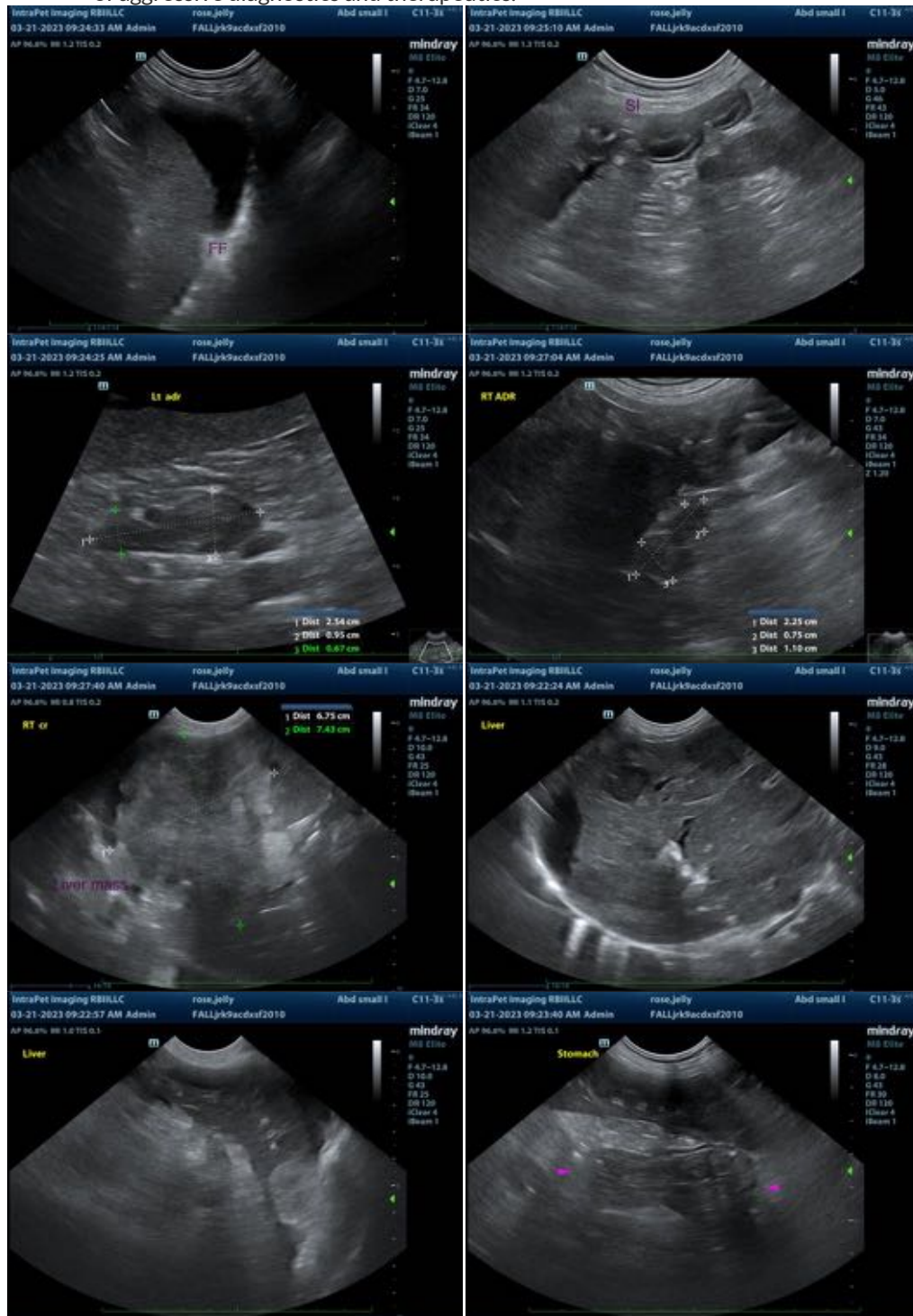
### **Secondary Findings:**

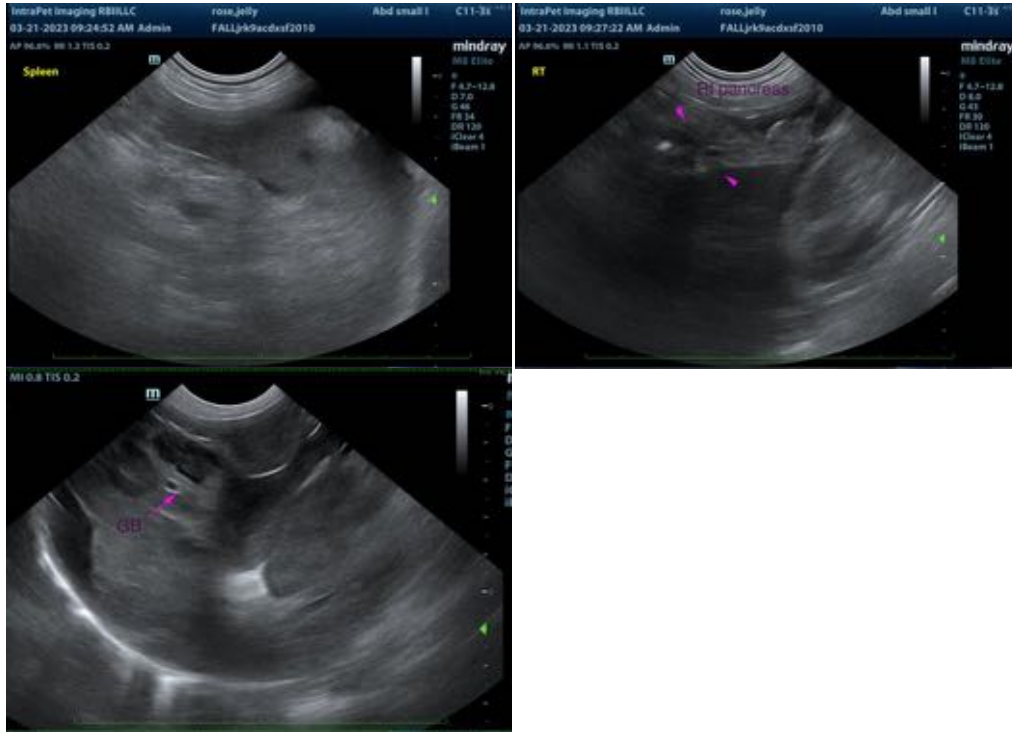
- Minor, bilateral dystrophic mineralization of the kidneys.
- Bilateral adrenomegaly. The right adrenal nodule could be consistent with a benign nodular hyperplasia or an emerging tumor.
- The splenic parenchymal changes could be consistent with benign process (i.e., lymphoid hyperplasia with myelolipomas). However, emerging neoplasia cannot be excluded.
- The gallbladder wall thickening could be consistent with cholecystitis, benign age-related hyperplasia or infiltrative neoplasia.
- 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.
- Consider fine needle aspirates of the hepatic nodules, if clotting status is appropriate. 25-gauge needles should be used. Care should be taken to avoid aspirating cystic areas. If cytology results are inconclusive, laparoscopic or surgical biopsies may be necessary to get a definitive diagnosis.

However, due to the concern for the guarded prognosis, palliative care should be considered in lieu of aggressive diagnostics and therapeutics.





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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