



PATIENT

Betty Johnson

SPECIES

Canine

BREED

Beagle Mix

SEX

SF

AGE

10 years

WEIGHT

60.2 lbs.

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Jasmine Palacios
SDEP Attendee

HOSPITAL NAME

Rivers Edge PMC

REFERRING VET

Dr. Cora Hollomon

INVOICE

13003

DATE

1/10/22

PRESENTING CLINICAL SIGNS

P presents on 1/10 for 2 days history of vomiting and bloody diarrhea. Unable to keep food down. Recent diagnosis of hypothyroidism by rDVM, p receives levothyroxine. p vomited up the last dose given last night. P was given beef bone on 1/8, p tends to get into garbage. On PE (1/10), pt is BCS 8/9, BAR. uncomfortable on abdominal palpation, the abdomen is soft and distended. heart sounds slightly muffled. Periodontal disease 3/4. Stiff gait, weakness in the hind end. Painful thoracolumbar spinal palpation. Scattered dermal and subcutaneous masses.

Abnormal PE/Chem/CBC/UA Results: See attached bloodwork: leukocytosis (21.22), neutrophilia (18.53), monocytosis (1.42), platelets 650,000, ALKP >2000, GGT 48. chloride 105 (109-122 normal range), coags WNL See attached radiographs: hepatomegaly. round opacity in mid-abdomen caudal to the liver. concern for liver mass. mild dorsal deviation of the trachea in area of hilar lymph nodes.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 cm exhibited normal thickness and tone. Primarily anechoic urine was present in the lumen. Moderate, nondependent, particulate sediment was present without evidence of calculus formation. The sediment is likely indicative of cellular or crystalline debris or potential mucus. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural changes were noted.

The area of the aortic trifurcation was free of pathology.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 7.0 cm in length. The right kidney measured 7.6 cm in length.

Adrenal Glands

The bilateral adrenal glands were prominent in size with nonhomogeneous yet nonmineralized parenchyma and mild asymmetrical contour. The left adrenal gland measured 3.6 cm length x 1.2 cm width at the caudal pole. The right adrenal gland measured 3.2 cm length x 1.2 cm width at the caudal pole and 2.1 cm width at the cranial pole.

Spleen

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age-related remodeling with minor potential for inflammatory or neoplastic disease.



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Liver/ Gallbladder

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The liver exhibited generalized enlargement with subjective maintained symmetrical yet rounded swollen hepatic contour and generalized increased hepatic parenchyma echogenicity. Multiple, variably sized, nonhomogeneous intraparenchymal nodules to nodular mass lesions were present. An example of a nodular mass measured 8.0 cm in diameter, in the subjective left hepatic parenchyma. An example of a nodule measured 2.0 cm in diameter, dorsal to the gallbladder. The gallbladder was non-distended in size with mild gallbladder debris. No evidence of gallbladder or peripheral inflammation was noted. The common bile duct was normal.

Gastrointestinal

The stomach exhibited moderate distention with retained anechoic and chyme. The potential for nonspecific ingesta is possible although not definitive.

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction, or foreign material.

The generalized small intestinal walls demonstrated intact wall layering and maintained 1:3 muscularis / mucosa ratio. The mucosa exhibited mild decreased echogenicity with occasional mucosal speckling. A segmental to diffuse ileus pattern consisting of mild fluid accumulation in the intestinal lumen was present. Segmental intestinal plication in the subjective mid ventral abdomen was present. Nonspecific shadowing intestinal luminal echo is suspected, along with areas of nonspecific mural hypertrophy exhibiting indistinct to loss of intestinal wall layering. Potential for linear echo within the plicated intestine lumen was noted.

The colon walls presented intact yet mildly prominent wall layering with mild thickened to echogenic submucosa. Nonformed to liquid fecal matter was present in the colon lumen with lumen dilation.

Pancreas

The left limb, right limb, and base of the pancreas presented hypoechoic to heterogeneous echogenicity compared to adjacent omental fat. Mild asymmetrical capsule margination was present with mild variable parenchymal swelling and mild peripancreatic reactivity / inflammation. No overt evidence of neoplasia.

Free Abdomen

Generalized reactive mesentery was present. Small pockets of scant free fluid were present. Overt lymphadenopathy was not noted, yet cannot be definitively excluded.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Hepatomegaly exhibiting generalized parenchyma hyperechogenicity with multiple, variably sized to nonhomogeneous intraparenchymal nodules to nodular masses - benign vs. neoplastic etiologies possible
- Bilateral adrenomegaly - nonspecific, hyperplasia, adenomatous change, potential for emerging neoplasia thought less likely yet cannot be definitively excluded



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- Mild gallbladder debris (non-mucocele)
- Hypomotile stomach with retained fluid / chyme
- Acute gastroenterocolitis pattern with areas of intestinal plication and suspect nonspecific shadowing luminal echo to potential linear foreign body
- Concurrent pancreatitis
- generalized reactive mesentery and scant peritoneal free fluid - potential for peritonitis

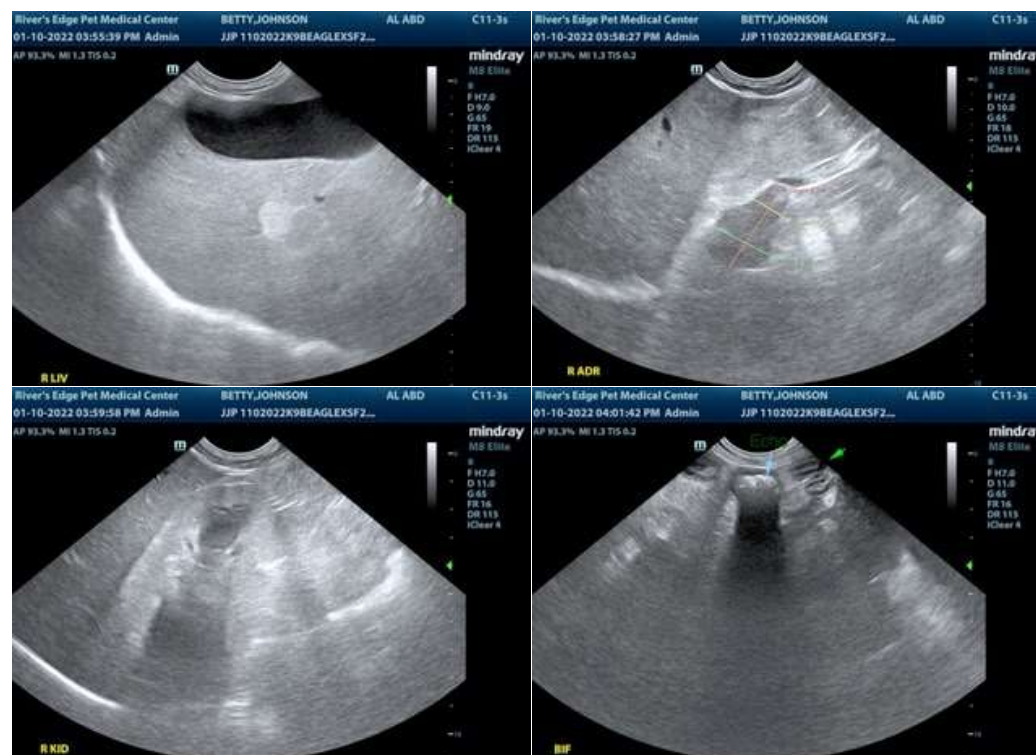
Secondary Findings

- Moderate urinary bladder sediment
- Bilateral chronic renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Given the patient's gastrointestinal signs, acute gastroenterocolitis pattern with a strong suspicion for segmental intestinal plication owing to small intestinal foreign body to linear foreign body warranted. Concurrent pancreatitis is suspected. Although evidence of additional visceral pathology was present, exploratory laparotomy for gross inspection of the intestinal tract with potential for enterotomy is recommended. Potential for emerging neoplastic etiology associated with the small intestine cannot be definitively excluded. Perioperative antibiotic use is recommended, given the potential for peritonitis.

With normal coagulation status, a hepatic biopsy could be considered at the time of surgery. Screening blood pressure is advised prior to surgical considerations.





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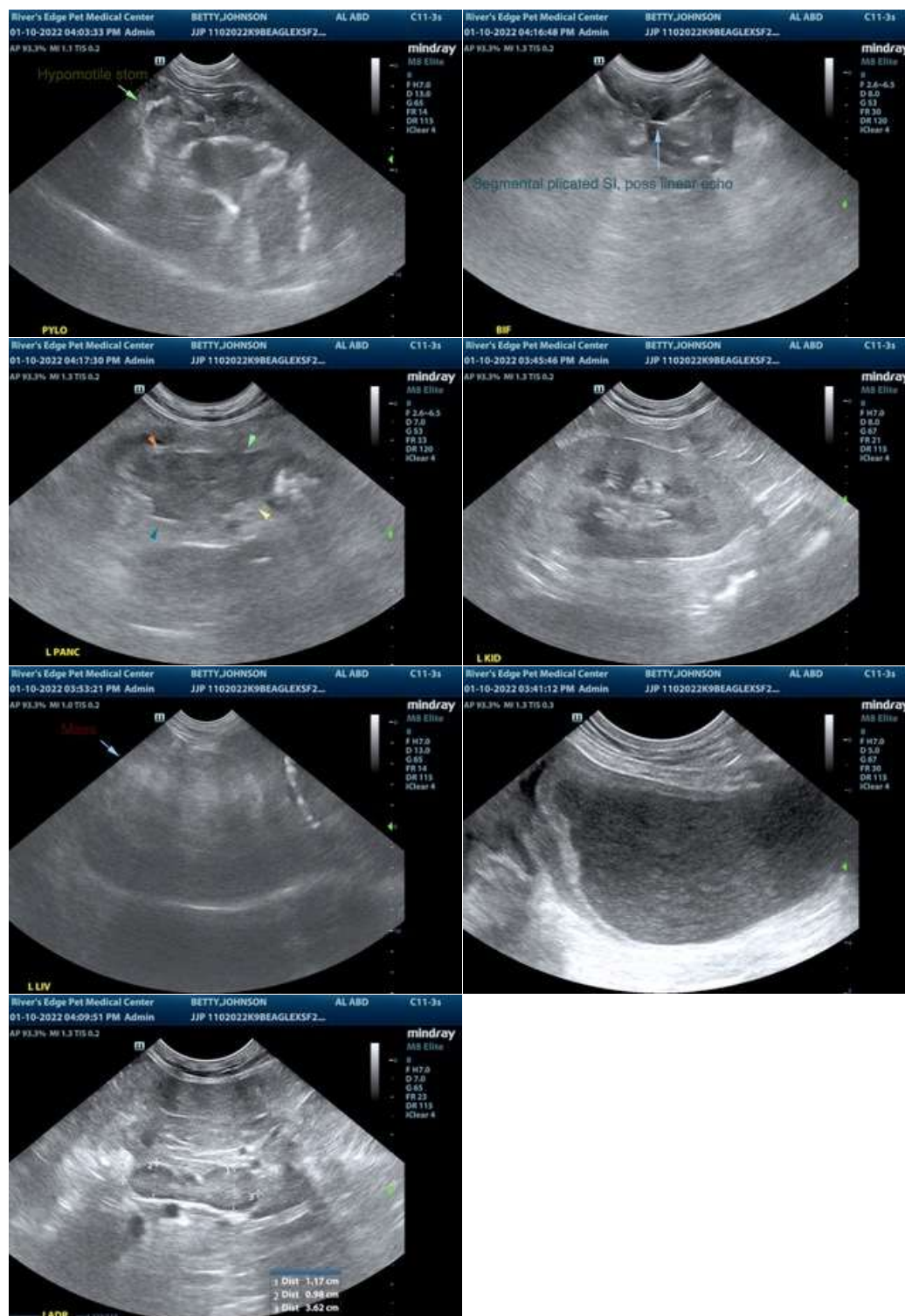
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.



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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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