



**PATIENT PRESENTING CLINICAL SIGNS**

**PATIENT** Mei Mei Yu  
**SPECIES** Canine  
**PRESENTING CLINICAL SIGNS** Seen as emergency today for hematochezia. O also reports that p hasn't been eating for 2 days and has been losing weight for a while now. Previous history of elevated liver values, in June, no treatment pursued at the time: AST 314, ALT 1012, ALP 684, Precision PSL 210  
 Abnormal PE/Chem/CBC/UA Results: cbc/chem on 10/28/2021: cbc - WBC 20 (4-15), Neu 15600 (2060-10600), Mon 3000 (0-840), nRBC 2/100, Platelets 643 chem - TP 3.7 (5-7.4), Alb 1.8 (2.7-4.4), AST 193 (15-66), ALT 386 (12-118), ALP 378 (5-131), Precision PSL 216

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**BREED**

Cocker Spaniel

**Urinary System**

Urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

**SEX**

Spayed Female

Right kidney is normal in size (6.4 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**AGE**

11 Years 10 Months

Left kidney is normal in size (6.7 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

**Adrenal Glands**

The adrenal glands are not well visualized in these images due to the severe peritonitis and inflammatory changes.

**WEIGHT**

29.5 Pounds

**Spleen**

Spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). No focal nodules or masses are observed. Splenic vasculature appears normal.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**Liver**

Liver is subjectively enlarged with rounded margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature appears normal.

**HOSPITAL NAME**

Lone Mountain AH

Gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

**REFERRING VET**

Dr. Lilliana Munoz

**Gastrointestinal**

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent.

**INVOICE NUMBER**

26735

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3 contractions per min). A focal jejunal concentric thickening with complete loss of normal layer detail

**DATE**

10/28/21



**PATIENT** and loss of serosal contour is noted. The thickness measures between 0.7-1.2 cm and the mass is surrounded by clumped, hyperechoic reactive mesentery and free fluid.

Mei Mei Yu

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

**SPECIES**

**Pancreas**

Canine

The pancreas is prominent, hypoechoic and mildly edematous. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

**BREED**

**Free Abdomen**

Cocker Spaniel

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

**ULTRASONOGRAPHIC FINDINGS**

**SEX**

Spayed Female

- Heterogenous Hepatomegaly – Differentials for hepatic changes include both benign steroid (vacuolar) hepatopathy or extramedullary hematopoiesis as well as infiltrative round cell or metastatic neoplasia. Top differential is metastatic neoplasia given the concurrent bowel changes.

**AGE**

11 Years 10 Months

- Small bowel mass – most concerning for infiltrative neoplasia with some suspicion for perforation and leakage of fluid into the abdomen from the mass.
- Pancreatic edema – most consistent with a secondary reactive change to the focal peritonitis caused by the bowel mass versus acute active pancreatitis.

**WEIGHT**

29.5 Pounds

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Recommendations include sampling the free abdominal fluid for cytology to rule in or out a septic abdomen, and if intracellular bacteria are present, proceeding immediately to surgery.

**INTERPRETED BY**

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DACVIM

Recommendations also include thoracic radiographs to rule out other metastatic disease prior to surgery. If the fluid is not septic, a fine needle aspirate of the liver, the bowel mass, and the fluid could all be performed if the patient's coagulation status is appropriate in order to try to obtain a diagnosis less invasively.

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Pending the results of the fluid analysis, etc., other recommendations include urinalysis with urine protein/creatinine ratio if protein is in the urine, a gastrointestinal malabsorption panel including TLI, PLI, folate and cobalamin to Texas A&M GI laboratory, baseline cortisol, as well as potentially bile acids, again, unless the previously recommended diagnostics reveal a diagnosis and an explanation for the hypoalbuminemia.

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**SEX**

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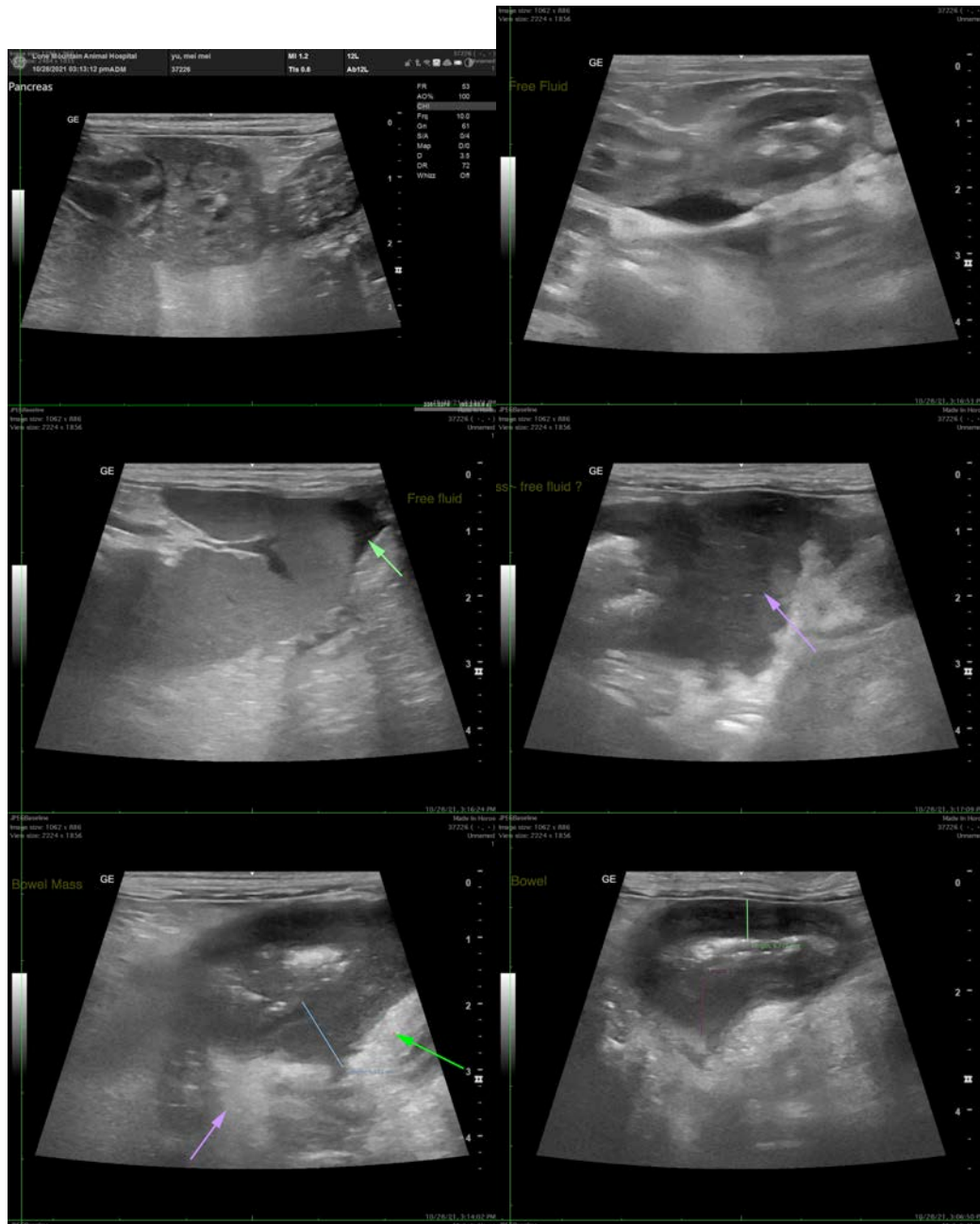
Dr. Lilliana Munoz

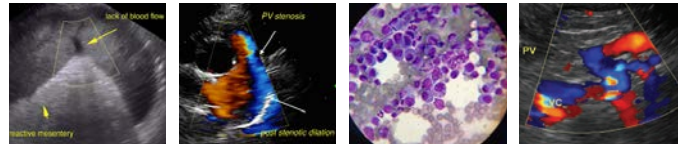
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**PATIENT**

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**SPECIES**

Canine

**BREED**

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**SEX**

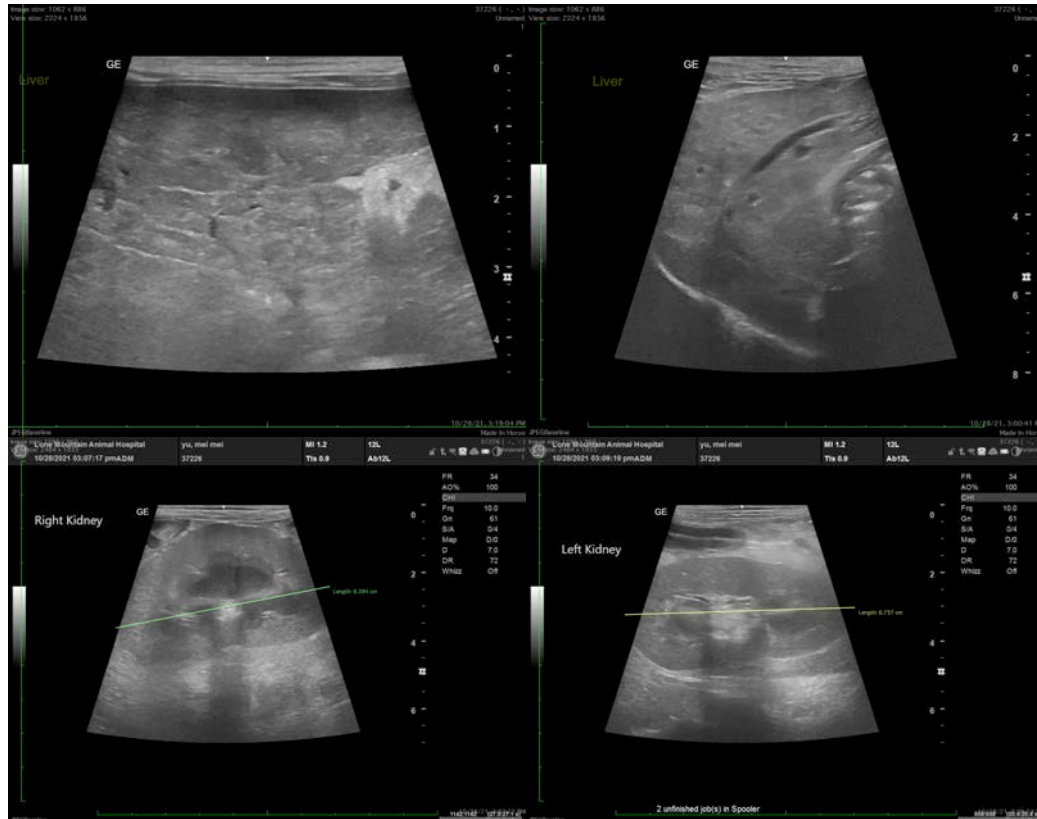
Spayed Female

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11 Years 10 Months

**WEIGHT**

29.5 Pounds



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.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

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.

**HOSPITAL NAME**

Lone Mountain AH

**Beth Johnson, DVM, DACVIM**  
Beth.Johnson@sonopath.com

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