



**PATIENT**

Cheyenne Murphy

**SPECIES**

Canine

**BREED**

Husky

**SEX**

Spayed Female

**AGE**

9 Years 9 Months

**WEIGHT**

75 Lbs.

**INTERPRETED BY**

Beth Johnson, DVM  
DACVIM

**IMAGING PERFORMED BY**

Marco and Dr.  
Ammeraal

**HOSPITAL NAME**

Sova

**REFERRING VET**

Joh Ammeraal, DVM

**INVOICE**

13971

**DATE**

2/17/22

**PRESENTING CLINICAL SIGNS**

History: Newly diagnosed diabetic about 2 months ago. Also chronic cystitis . Urine culture pending, Has been anorexic/extremely picky on and off for about 16 days. Was on Enrofloxacin when appetite dropped but owner stopped a week ago and no change. Attitude normal overall and home and still active.

Abnormal PE/Chem/CBC/UA Results: BAR in hospital , No abnormalities on exam Fructosamine 337umol/L on Idexx in house UA: USG 1.009, Glucose 3+, WBC 11-20, Rods 51-100 HPF BG 187 U/L, ALKP 526 U/L. was 193 U/L- 12/17/21 ALT 425 U/L was 50 U/L on 12/21, T bili 2.6 mg/dL, AST 110U/L Crea 2.0ug/dL , BUN 15 mg/dL CBC: Neutr 12118/uL, HCT 38%

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

Urinary bladder is moderately distended. It has a normal uniform wall thickness of <0.2 cm. Contents include primarily anechoic fluid combined with both gravity dependent and suspended echogenic non-shadowing debris within the fluid. There is a larger, more echogenic non-shadowing density suspended within the fluid, possibly representative of mucus or blood clot. No masses or cystoliths are observed. The trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

Left kidney is normal is size (7.41 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

Right kidney is normal is size (7.59 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**

Left adrenal gland is normal in size (0.69 cm at cranial pole and 0.64 cm at caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

Right adrenal gland is normal in size (0.76 cm at cranial pole and 0.76 cm at caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

**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.

**Liver**

Liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. Visible vasculature and biliary tree appear normal without distension or congestion. Note, multiple, poorly defined, hypoechoic nodules, of varying sizes throughout the parenchyma.

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.



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***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. No appreciable lymphadenopathy in these images.

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). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

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

***Pancreas***

Pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

***Free Abdomen***

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

**ULTRASONOGRAPHIC FINDINGS**

- Urine changes are most consistent with cellular debris or crystalluria. There is a larger more echogenic density, potentially consistent with mucus or blood clot or less likely, a non-shadowing cystolith.
- A nodular liver, differentials for which include infiltrative neoplasia, such as round cell neoplasia as a top differential. Benign differentials, such as nodular regeneration or extramedullary hematopoiesis or even a severe presentation of a steroid or vacuolar hepatopathy are possible, but considered less likely.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Recommendations for this patient include a fine needle aspirate of the liver, if patient coagulation status is appropriate. In the meantime, therapeutic recommendations include IV fluids, antiemetics, gastroprotectants, broad spectrum antibiotics (ideally, based off of culture and sensitivity results) with monitoring of the liver enzymes and total bilirubin for improvement. If improvement is not noted and/or if total bilirubin progresses, recheck ultrasound of the gallbladder, liver and pancreas is recommended.



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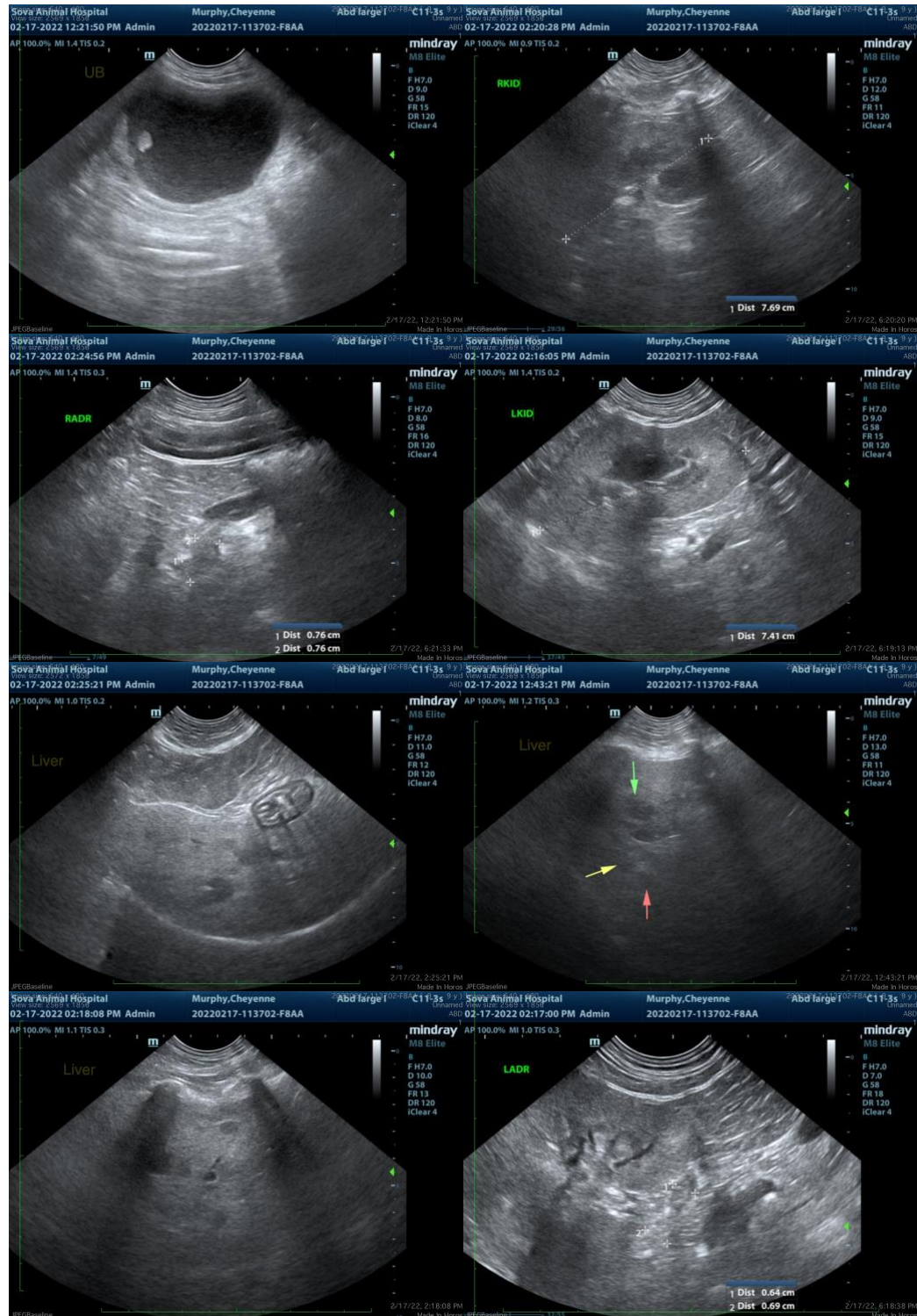
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

**Beth Johnson, DVM DACVIM**

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