



## PATIENT

Simba Cosgrove

## SPECIES

Feline

## BREED

DSH

## SEX

MN

## AGE

14 years

## WEIGHT

7.06 lbs.

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Jenna Walsh, CVT

## HOSPITAL NAME

Santa Clara AH

## REFERRING VET

Dr. Barbara Brasted  
-Maki

## INVOICE

12543

## DATE

11/5/21

## PRESENTING CLINICAL SIGNS

Simba has a chronic history of intermittent vomiting and weight loss. He generally eats well, but has recently become more picky. His history includes (difficult to control) hyperthyroidism treated with methimazole and chronic renal insufficiency. On his most recent exam, intestines palpated thickened, prompting the decision to assess further with ultrasound. Current Medications Methimazole

Abnormal PE/Chem/CBC/UA Results: CBC: Hematocrit is low normal at 28.5, while hemoglobin is slightly low at 8.4 Chemistries: Glucose is slightly low at 70 (suspect delayed separation). Azotemia is present: SDMA is 15, creatinine is 2.6 (up from 2.2 last time checked), BUN is 59 (up from 49). Phosphorus is elevated at 6.5. Albumin is decreased at 2.5. Liver enzymes are elevated: ALT is elevated at 537 (up from 245 last checked), a AST is elevated at 90, ALP is elevated at 284 (up from 111). Urinalysis: Urine is near isosthenuric (SG 1.016), with mild microscopic hematuria thought to be iatrogenic T4 is elevated at 5.7 Simba's ALT has been consistently elevated, even when his T4 has been normal.

## 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. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

The area of the aortic trifurcation was free of pathology.

Normal renal size with asymmetrical margination were present in both kidneys. The renal cortex presented uniformly increased in echogenicity with uniform echotexture. The renal cortex appeared to be hypertrophied resulting in an altered cortex: medulla ratio. Moderate loss of corticomedullary border demarcation was also present. The renal medullary volume was subjectively reduced. Mild pyelectasia was noted in both kidneys. The left kidney measured 3.4 cm in length. The right kidney measured 3.9 cm in length.

### Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.37 cm width. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.30 cm width.

### Spleen

The spleen was normal in size with maintained symmetrical capsule contour. Subtle hypoechoic nodules were present diffusely throughout the parenchyma without associated capsule impingement or distortion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. The spleen measured 0.92 cm in width.



**PATIENT**

Simba Cosgrove

**SPECIES**

Feline

**BREED**

DSH

**SEX**

MN

**AGE**

14 years

**WEIGHT**

7.06 lbs.

**Liver/ Gallbladder**

The liver exhibited potential for mild generalized enlargement with normal structure and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. Intermittent intraparenchymal cysts containing anechoic fluid were present. The hepatic and portal vasculature were normal in appearance without signs of congestion.

The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

**Gastrointestinal**

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 gastric body wall width measured 0.26 cm.

The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material. The duodenum wall width measured 0.22 cm. The jejunum wall width measured 0.25 cm.

Normal visible colon wall layers were present with apparent formed feces in lumen.

**INTERPRETED BY**

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

**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.

**IMAGING PERFORMED BY**

Jenna Walsh, CVT

**Free Abdomen**

Intermittent, mid-abdominal mesenteric lymph nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). An example lymph node measured 1.3 cm x 0.6 cm.

**HOSPITAL NAME**

Santa Clara AH

Small pockets of scant peritoneal free fluid were noted.

**ULTRASONOGRAPHIC FINDINGS**

**REFERRING VET**

Dr. Barbara Brasted  
-Maki

**Primary Findings**

**INVOICE**

12543

**DATE**

11/5/21

- Bilateral moderate chronic interstitial nephrosis renal pattern
- Subtle micronodular splenic parenchyma
- Hepatopathy with intermittent intraparenchymal cysts
- Chronic active pancreatitis
- Probable chronic inflammatory enteropathy



**PATIENT**

Simba Cosgrove

**SPECIES**

Feline

**BREED**

DSH

**SEX**

MN

**AGE**

14 years

**WEIGHT**

7.06 lbs.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The subtle micronodular splenic parenchymal changes are nonspecific and may indicate subtle micronodular lymphoid hyperplasia or hematopoiesis. However, potential for emerging splenic neoplasia, although thought less likely, cannot be definitively excluded.

Although not definitive, chronic cholangiohepatitis given the primarily elevated ALT / AST combination with potential for primary or concurrent vacuolar hepatic changes are possible with less likely potential for hepatic neoplasia.

Assuming normal clotting status, hepatosplenic FNA using a 25-gauge needle is warranted for screening cytology. Chronic Triad Disease may be a top consideration in this patient. Further assessment may include a GI panel to include PLI/TLI/Cobalamin/Folate. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered. Empirically, as-needed gastrointestinal support, hydrolyzed diet trial, cobalamin supplementation, Prednisolone trial at lowest effective dose to control clinical signs +/- analgesia if evidence of cranial abdominal or subxiphoid discomfort on palpation maybe considered. Screening blood pressure is suggested given the chronic kidney disease.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Jenna Walsh, CVT

**HOSPITAL NAME**

Santa Clara AH

**REFERRING VET**

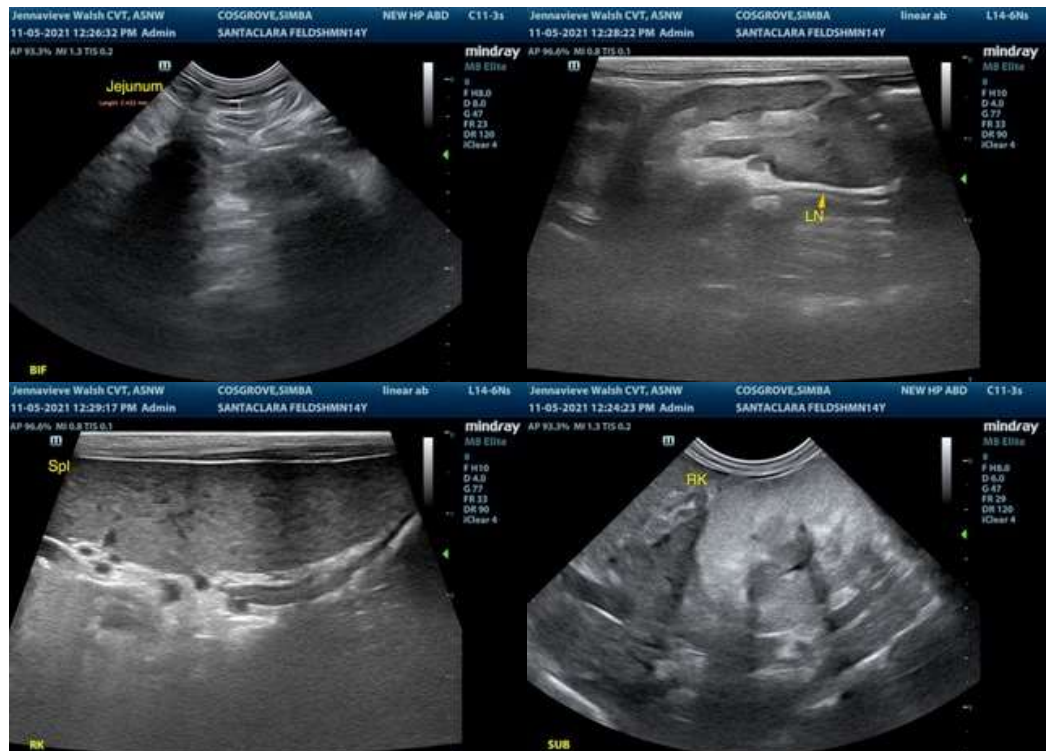
Dr. Barbara Brasted  
-Maki

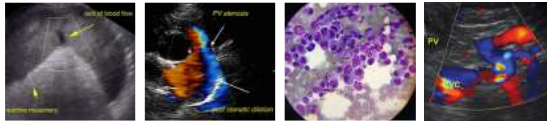
**INVOICE**

12543

**DATE**

11/5/21





**PATIENT**

Simba Cosgrove

**SPECIES**

Feline

**BREED**

DSH

**SEX**

MN

**AGE**

14 years

**WEIGHT**

7.06 lbs.

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Jenna Walsh, CVT

**HOSPITAL NAME**

Santa Clara AH

**REFERRING VET**

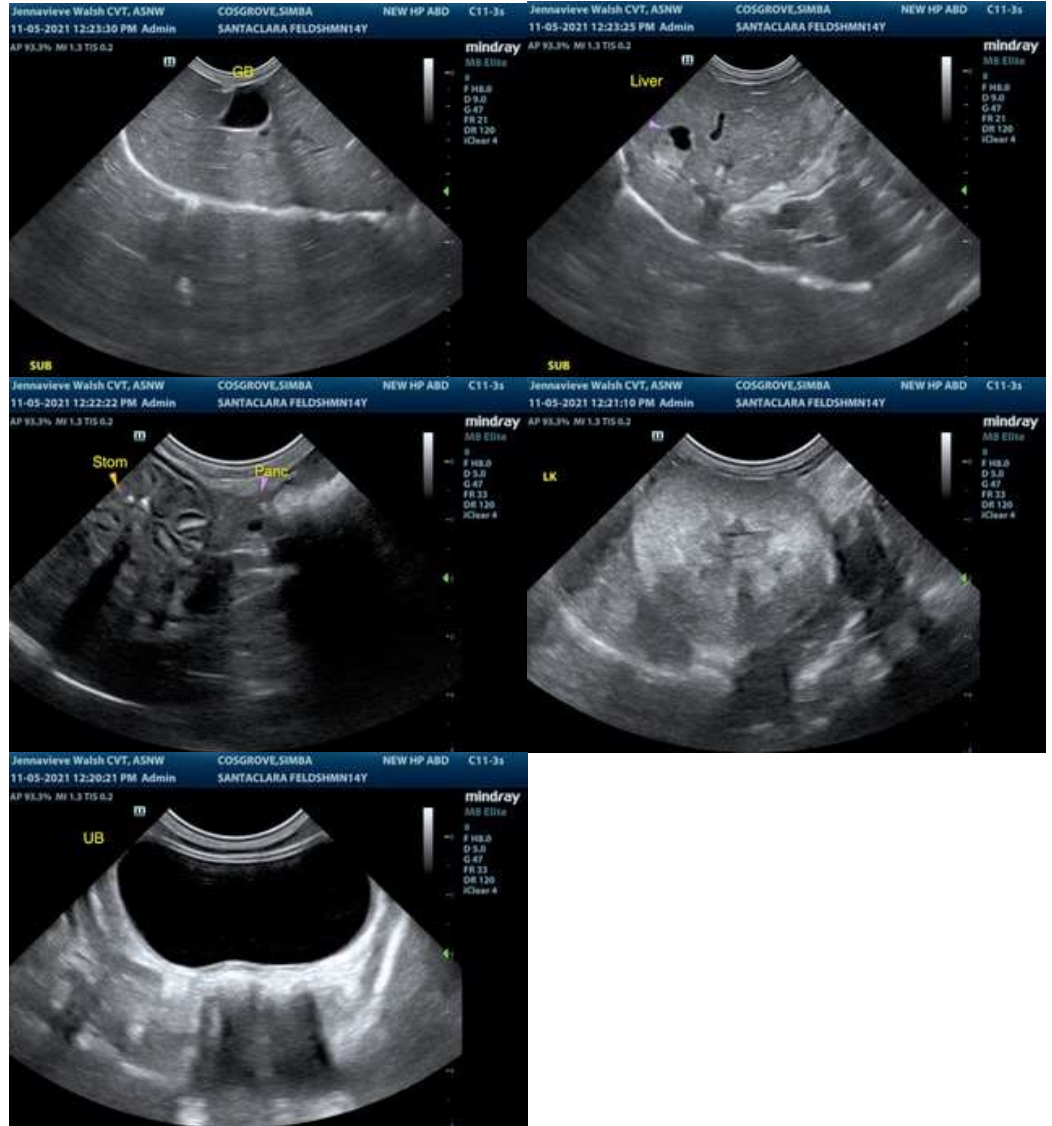
Dr. Barbara Brasted  
-Maki

**INVOICE**

12543

**DATE**

11/5/21



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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)  
info@SonoPath.com