



**PATIENT PRESENTING CLINICAL SIGNS**

**PATIENT** Axel Tirpack  
Recheck from previous liver mass seen on scan. Recent bloody diarrhea. Unsure if related. Abnormal PE/Chem/CBC/UA Results: ALT/ALK-Phos elevated. See attached report.

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SPECIES** Canine

**BREED**

Mix

**SEX**

Neutered Male

**AGE**

10

**WEIGHT**

61

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING PERFORMED BY**

Dr. Christensen

**HOSPITAL NAME**

Tranquility VC

**REFERRING VET**

Dr. Christensen

**INVOICE**

44554

**DATE**

8/8/23

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**Urinary System**

The urinary bladder is moderately distended with anechoic urine. The Bladder wall, trigone, ureteral papillae and visible urethra (to a depth of 2cm) appear normal with no evidence of wall thickening, mucosal irregularities, masses or cystic calculi.

The visualized areas of prostate and surrounding tissue appear normal. Unfortunately, the prostate is not fully visualized likely due to its intrapelvic location. Correlate with rectal exam findings.

The left kidney has a normal shape and size (6.85 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney has a normal shape and size (7.07 cm). Overall echogenicity is normal with adequate corticomedullary distinction and a typical 1:3 cortex:medulla ratio. There is no evidence of focal perinephric inflammation or effusion. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter. Renal vasculature is normal.

**Adrenal Glands**

The left adrenal gland is normal in size measuring 0.48 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.69 cm at the caudal pole. It is observed in its normal position between the cranial aspect of the right kidney and the caudal vena cava. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

**Spleen**

The spleen is subjectively normal in size, echotexture is homogenous, and the splenic capsule is smooth with no irregularities. The blood flow through the hilus and splenic parenchyma appears normal. No focal parenchymal abnormalities are visualized.

**Liver**

The liver is large and irregular in shape. The visible portions of the vasculature and biliary tract appear normal. There is a somewhat ill-defined mixed echogenic irregular mass effect visualized in the caudomedial aspect of the liver with some small cystic regions. This lesion measures approximately 9.53 cm x 7.18 cm.

The gallbladder lumen is significantly distended with moderate debris. The wall of the gall bladder is not thickened and has a smooth mucosal surface. The cystic and common bile ducts are normal/not visible.



**PATIENT** *Gastrointestinal*

**AXEL TIRPACK**  
The stomach contains minimal luminal contents. It measures at a normal thickness of <0.7cm with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate and there is no impression of reduced peristaltic activity. No masses or focal lesions were observed.

**SPECIES**

Canine

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. Duodenum wall measures 0.43 cm. Jejunum wall measures 0.32 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

**BREED**

Mix

**SEX**

Neutered Male

The ileocecal junction was visualized and exhibited normal intact wall layering and is subjectively of normal thickness. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

**AGE**

10

*Pancreas*

The area of the pancreas is normal and isoechoic to surrounding mesentery. There is no evidence of nodules or cystic lesions. There is no evidence of regional mesenteric inflammation or fluid.

**WEIGHT**

61

*Free Abdomen*

Evaluation of the peritoneal cavity did not reveal any evidence of effusion, or subjective lymphadenomegaly. The Medial iliac nodes appear normal and there was no evidence of a caudal aortic thrombus at the bifurcation. The omentum is of normal uniform echogenicity.

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**ULTRASONOGRAPHIC FINDINGS**

- Large, irregular liver with an ill-defined heterogeneous mass effect (current measurement approximately 9.53 cm x 7.18 cm, previous measurement 11/2022 was 7.8 cm x 4.6 cm) – Findings are consistent with a progressive hepatic mass lesion. This could represent a benign or neoplastic lesion (adenoma, carcinoma, hyperplasia, etc.). Primary differential would be a hepatic carcinoma.
- Moderate gallbladder debris – The significance of the aggregated gallbladder debris is unclear. This could represent an early mucocele, cholestasis, or may be secondary to fasting but seems unlikely to be causing a current issue. Recommend continued monitoring.

**IMAGING PERFORMED BY**

Dr. Christensen

**HOSPITAL NAME**

Tranquility VC

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**REFERRING VET**

Dr. Christensen

The previously described hepatic mass lesion is visualized and subjectively appears larger, indicated likely progression. Based on the appearance, primary differential would be a hepatic carcinoma. These tend to be somewhat slow to metastasize and can be slow-growing. If surgical removal would be considered, a contrast CT scan is recommended. If the mass lesion can be removed in its entirety, the prognosis is often good. There is no overt evidence of metastasis visualized at this time.

**INVOICE**

44554

Recommend three view thoracic radiographs to evaluate for possible concurrent thoracic disease/involvement.

**DATE**

8/8/23



**PATIENT**

Axel Tirpack

**SPECIES**

Canine

**BREED**

Mix

**SEX**

Neutered Male

**AGE**

10

**WEIGHT**

61

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING  
PERFORMED BY**

Dr. Christensen

**HOSPITAL NAME**

Tranquility VC

**REFERRING VET**

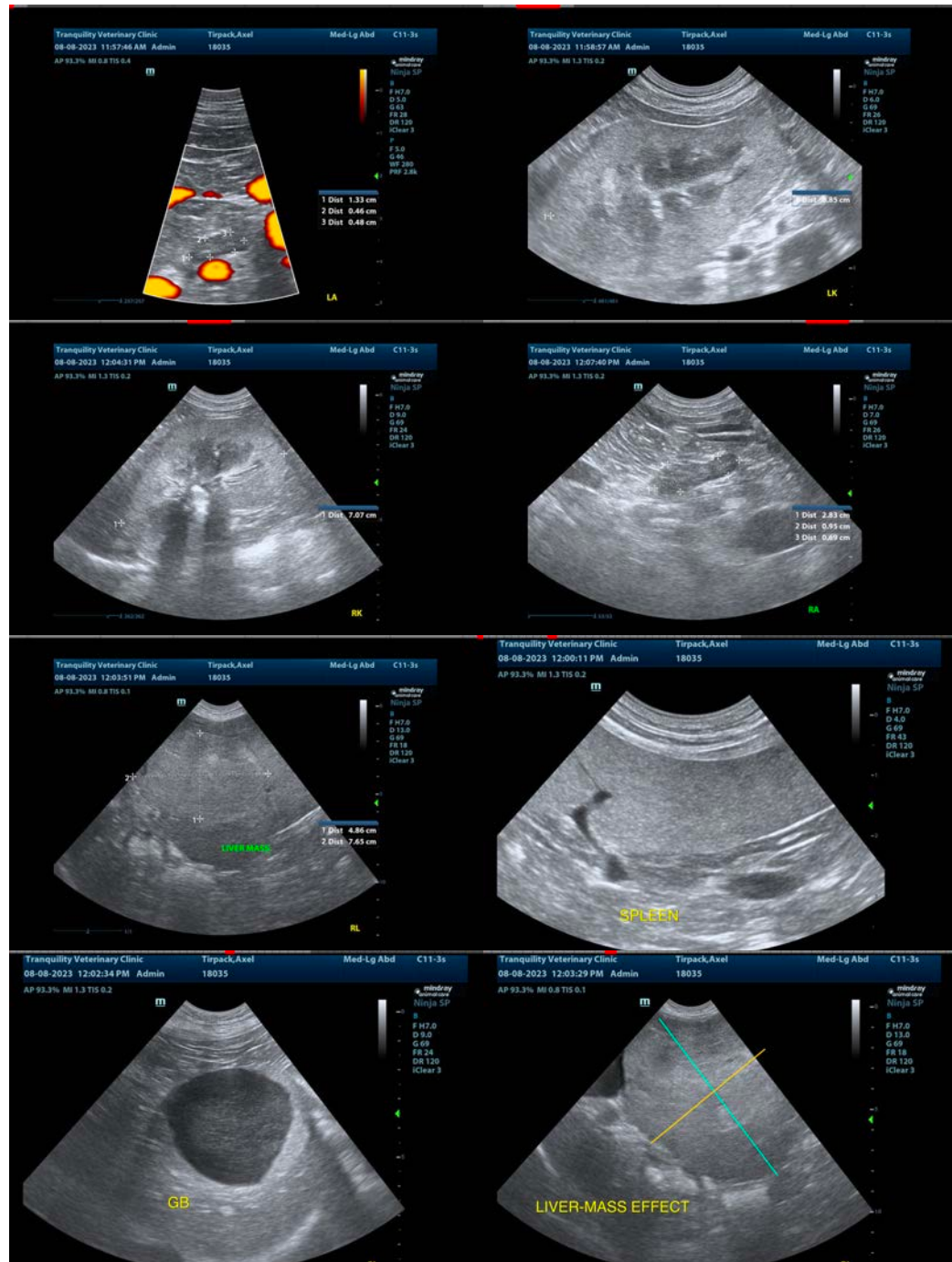
Dr. Christensen

**INVOICE**

44554

**DATE**

8/8/23





**PATIENT**

Axel Tirpack

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

**SPECIES**

Canine

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.

**BREED**

Mix

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)

**SEX**

Neutered Male

info@sonopath.com

**AGE**

10

**WEIGHT**

61

**INTERPRETED BY**

Kathleen Sennello DVM,  
MS, Diplomate ACVIM  
(Small Animal Internal  
Medicine)

**IMAGING  
PERFORMED BY**

Dr. Christensen

**HOSPITAL NAME**

Tranquility VC

**REFERRING VET**

Dr. Christensen

**INVOICE**

44554

**DATE**

8/8/23