



## PATIENT

Boomer Macchina

## SPECIES

Canine

## BREED

Shih Tzu

## SEX

Neutered Male

## AGE

10 Years

## WEIGHT

7.53 kg

## INTERPRETED BY

Eric Lindquist, DMV,  
DABVP(CFM), Cert.  
IVUSS

## IMAGING PERFORMED BY

Carlie Koltek RVT

## HOSPITAL NAME

Tuxedo Animal  
Hospital

## REFERRING VET

Dr. Knudson  
(Southglen Vet)

## INVOICE

12759

## DATE

12/19/25

## PRESENTING CLINICAL SIGNS

Presented Dec 13th for approx 1 week history of anorexia, lethargy, noisy breathing and an enlarged abdomen.

PE: paradoxical breathing with mild-moderately increased effort. Approx 6% dehydration. Mildly distended abdomen, no obvious pain appreciated. Right mandibular LN mildly enlarged. CBC: WBC =  $22.19 \times 10^9/L$  (5.05 - 16.76) MONOS \* \*  $3.72 \times 10^9/L$  (0.16 - 1.12) NEUT \* \*  $16.29 \times 10^9/L$  (2.95 - 11.64) BASO =  $0.12 \times 10^9/L$  (0.00 - 0.10) RETIC-HGB = 30.4 pg (22.3 - 29.6) PCT = 0.49 % (0.14 - 0.46) CHEM: ALKP = 1870 U/L (23 - 212) ALT = 212 U/L (10 - 125) GGT = 20 U/L (0 - 11) Pan Lipase = 306 U/L (0 - 200) CitPT: WNL Radiograph / FAST scan: moderate amounts of peritoneal and pleural effusion, serosanguinous fluid aspirated. Fluid analysis and cytology: both effusions high protein and high cellularity, predominantly large lymphocytes. Pending: flow cytometry

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized, and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some mild age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The left kidney measured 4.5 cm in length. The right kidney measured 4.5 cm in length.

### Adrenal Glands

The **left adrenal gland** was enlarged, hypoechoic, swollen and irregular. The left adrenal gland measured 0.74 cm width at the cranial pole and 0.59 cm width at the caudal pole.

The **right adrenal gland** was not visualized.

### Spleen

The **spleen** was mildly enlarged with uniform, but subtly micronodular parenchyma, and undulating capsular contour. This is consistent with reactive spleen owing to immune stimulus or early infiltrative disease such as mast cell disease or lymphoma. 25-gauge FNA would be ideal if weight loss is an issue to differentiate early round cell neoplasia versus splenitis or reactive spleen all of which can present in this manner.

### Liver

The **liver** revealed generalized hepatomegaly with swollen irregular isoechoic masses and increased portal markings. The gallbladder wall was echogenic and nodular.

### Gastrointestinal

Variable **gastrointestinal** thickening was noted. Loss of gastrointestinal detail was also evident.



**PATIENT**

Boomer Macchina

**SPECIES**

Canine

**BREED**

Shih Tzu

**SEX**

Neutered Male

**AGE**

10 Years

**WEIGHT**

7.53 kg

**INTERPRETED BY**

Eric Lindquist, DMV,  
DABVP(CFM), Cert.  
IVUSS

**IMAGING PERFORMED BY**

Carlie Koltek RVT

**HOSPITAL NAME**

Tuxedo Animal  
Hospital

**REFERRING VET**

Dr. Knudson  
(Southglen Vet)

**INVOICE**

12759

**DATE**

12/19/25

**Pancreas**

The region of the **pancreas** was obscured from extensive hyperechoic surrounding fat with hypoechoic parenchyma.

**Free Abdomen**

The **lymph nodes** presented abnormal length to width ratio with distorted, swollen, irregular contour. Parenchymal detail was indiscernible. This is most consistent with lymphoproliferative disease such as lymphoma/round cell neoplasia, metastatic disease, or an aggressive inflammatory process. FNA, cytology and culture are warranted. The lymph nodes measured up to 3.0 cm in the cranial abdomen.

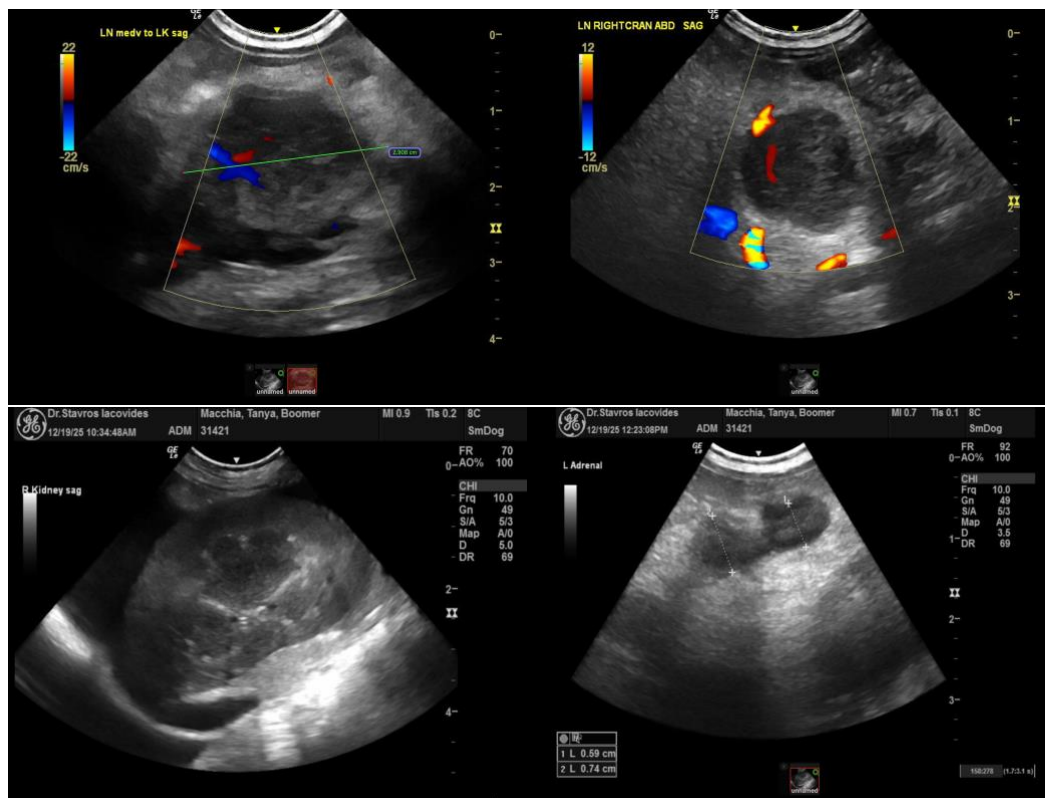
Pleural effusion was noted through the diaphragm.

**ULTRASONOGRAPHIC FINDINGS**

- Multicentric round cell neoplasia pattern involving the lymph nodes, liver, possibly the spleen/left adrenal gland and likely the GI tract.

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Ultrasound guided FNA of any of the effected organs and pleurocentesis would be ideal with chemotherapeutic intervention yet, prognosis is poor.





## PATIENT

Boomer Macchina

## SPECIES

Canine

## BREED

Shih Tzu

## SEX

Neutered Male

## AGE

10 Years

## WEIGHT

7.53 kg

## INTERPRETED BY

Eric Lindquist, DMV,  
DABVP(CFM), Cert.  
IVUSS

## IMAGING PERFORMED BY

Carlie Koltek RVT

## HOSPITAL NAME

Tuxedo Animal  
Hospital

## REFERRING VET

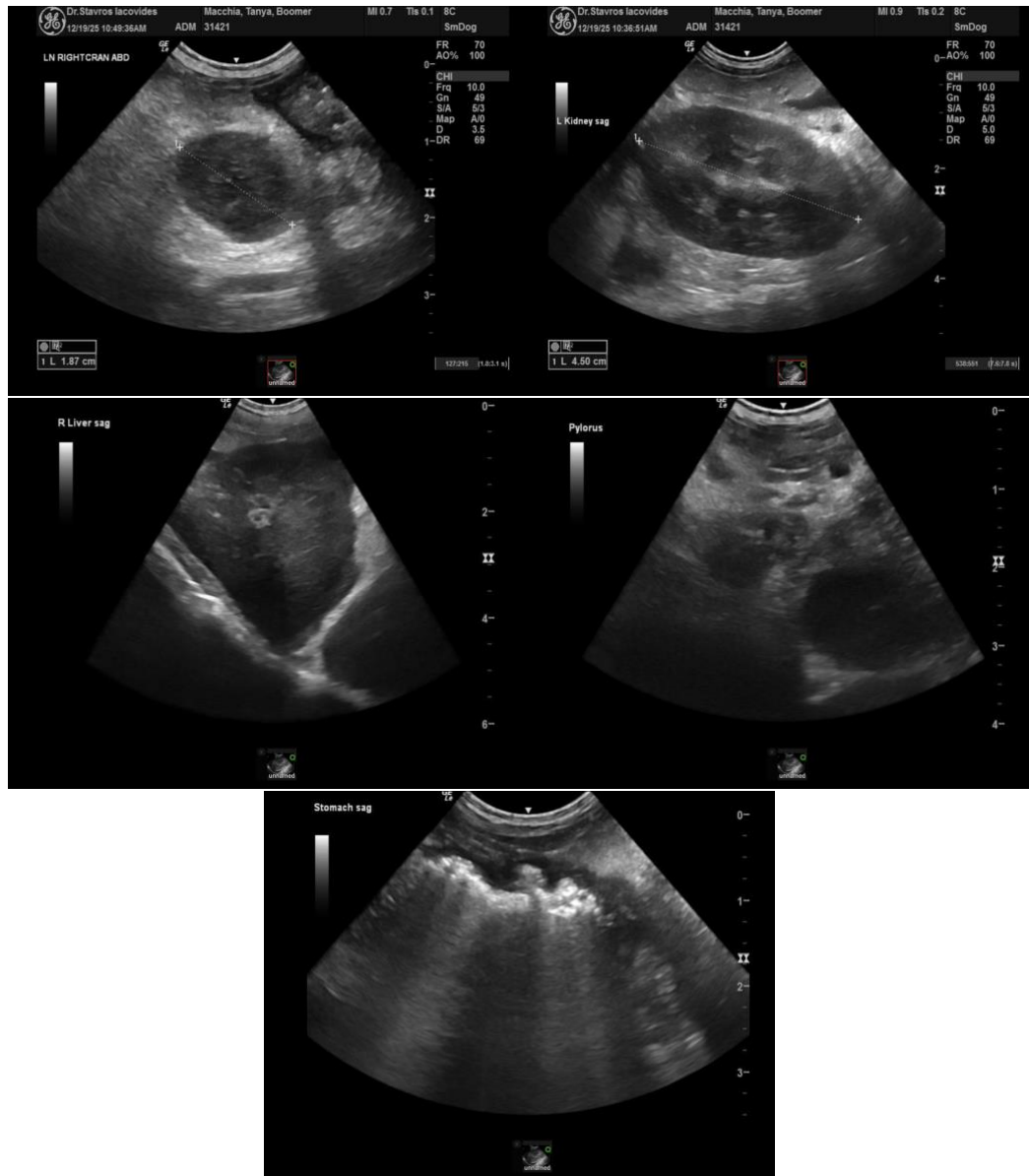
Dr. Knudson  
(Southglen Vet)

## INVOICE

12759

## DATE

12/19/25



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.

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.

Eric Lindquist, DMV, DABVP(CFM), Cert. IVUSS,

CEO, Owner, Founder -- SonoPath.com

[info@SonoPath.com](mailto:info@SonoPath.com)



## PATIENT

Boomer Macchina

## SPECIES

Canine

## BREED

Shih Tzu

## SEX

Neutered Male

## AGE

10 Years

## WEIGHT

7.53 kg

## INTERPRETED BY

Eric Lindquist, DMV,  
DABVP(CFM), Cert.  
IVUSS

## IMAGING PERFORMED BY

Carlie Koltek RVT

## HOSPITAL NAME

Tuxedo Animal  
Hospital

## REFERRING VET

Dr. Knudson  
(Southglen Vet)

## INVOICE

12759

## DATE

12/19/25