



PATIENT

Max Trombino

SPECIES

Canine

PRESENTING CLINICAL SIGNS

- Newly Anemic, lethargic, inappetent this AM
- QAR, Pale MM, Tense on abd palpation
- Possible intrathoracic mass on rads
- Abnormal PE/Chem/CBC/UA Results: RBC 4.03, HCT 29.8%, Retic 109, ALP 309

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN AND HEART

BREED

French Bulldog

SEX

MN

AGE

14yr

WEIGHT

32lb

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO M-mode	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT	--	--	--	1.25	35	68	0.1
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	LAD LA MAX 4 Chamber	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT	176	NM	0.9	32lb	2.2	2.2	--

Cardiac Presentation

The echocardiogram in this patient demonstrated normal left atrial size and structure. Chamber volume and blood echogenicity were normal. The cranial and caudal mitral valve leaflets presented minor irregular age-related changes that are not clinically significant at this time with adequate extension in systole and union in diastole. No definitive significant MR on Doppler. The left ventricle presented normal free wall and septal thicknesses with linear contour. The myocardium presented some echogenic remodeling consistent with expected age-related change and possible fibrosis. Contractility of the ventricular walls was adequate and in normal range for this breed and patient size. The left ventricular outflow tract demonstrated normal laminar flow with subjectively unremarkable structure. Subjective assessment of the right atrium and auricle revealed normal mild increased size, normal structure and content. No evidence of masses was noted. Tricuspid valvular assessment demonstrated expected findings for this age patient. The right ventricle presented mild increased size compared to the LV with mild increased myocardial echogenicity and normal free wall thickness. Pulmonic tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). No dilation due to heartworm disease, cor pulmonale, stenosis, or pulmonic hypertension was noted. No visible pericardial or free pleural fluid was noted. The mediastinum was free of masses in the visible window.

Urinary System

The urinary bladder presented uniformly thickened urinary bladder wall isoechoic to the adjacent normal urinary bladder wall. The luminal margin of the thickened urinary bladder wall was mildly asymmetrical in contour. Mineralization or echogenic foci within the thickened areas of urinary bladder

INTERPRETED BY

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

IMAGING PERFORMED BY

Vincent Ravancho,
CVT

HOSPITAL NAME

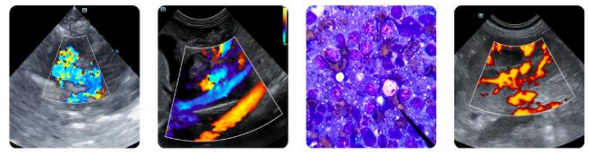
Millburn Vet Hospital

REFERRING VET

Dr. Turowsky

INVOICE
24242

DATE
03/18/2026



PATIENT	Max Trombino	wall was not present. The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal 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.
SPECIES	Canine	The residual prostate appeared normal and free of pathology.
BREED	French Bulldog	Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 4.5 cm in length. The right kidney measured 5.0 cm in length.
SEX	MN	The area of the aortic trifurcation was free of pathology.
AGE	14yr	Adrenal Glands The left adrenal gland was mildly enlarged in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.66 cm width caudal pole. The right adrenal gland was not definitively visualized.
WEIGHT	32lb	Spleen The spleen exhibited normal size to mild regional enlargement primarily in the mid to caudal spleen with mild capsule asymmetry. Non-homogenous mildly hypoechoic splenic parenchyma with normal splenic vascularity.
INTERPRETED BY	R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	Liver/Gallbladder The liver was subjectively normal in size, 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. Normal vascular volume. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and mild non-organized debris. The cystic and common bile ducts were normal.
IMAGING PERFORMED BY	Vincent Ravancho, CVT	Gastrointestinal The stomach presented intact mildly thickened wall. Empty lumen with mild lumen gas. The gastric wall measured 0.62 cm in width.
HOSPITAL NAME	Millburn Vet Hospital	The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The duodenum exhibited mild prominent mucosa with subtle hyperechoic mucosal striations. The lumen of the small intestine was empty with no signs of mechanical/metabolic ileus, obstruction or foreign material. The duodenum wall measured 0.55 cm width. The jejunum wall measured 0.40 cm width.
REFERRING VET	Dr. Turowsky	Normal visible colon wall layers were present with apparent formed feces in lumen.
INVOICE	24242	Pancreas The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.
DATE	03/18/2026	Free Abdomen



PATIENT

Max Trombino

A mildly hypoechoic swollen cranial mesenteric lymph node was present measuring 1.1 cm in diameter. Mild perisplenic hyperechoic omentum and minor effusion was present.

ULTRASONOGRAPHIC FINDINGS

SPECIES

Canine

Primary

- Normal LA/ LV with myocardial remodeling
- Mild RA / RV enlargement - no evidence of congestive right heart failure
- Mild splenomegaly exhibiting non-homogenous hypoechoic parenchyma, regional perisplenic hyperechoic omentum and scant effusion
- Normal volume liver
- Mild gallbladder debris (non-mucocele)
- Mildly thickened stomach and duodenum
- Focal mildly swollen cranial mesenteric lymphadenopathy

BREED

French Bulldog

SEX

MN

Secondary

- Bilateral chronic renal changes
- Mild cystitis pattern

AGE

14yr

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

WEIGHT

32lb

A definitive intrathoracic mass was not overtly visualized yet not definitively excluded given pericardial pulmonary artifact. Although sampling is required for further clarification, the spleen is highly concerning for neoplastic criteria. Assuming normal clotting status and using 25ga needle, splenic FNA cytology is warranted for further clarification.

INTERPRETED BY

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

The mildly thickened stomach and duodenum are nonspecific and may indicate inflammatory criteria with potential for non-obvious pancreatitis which may present sonographically normal. Correlation with a spec CPL could be considered.

No indication for cardiac medications.

**IMAGING
PERFORMED BY**

Vincent Ravancho,
CVT

HOSPITAL NAME

Millburn Vet Hospital

REFERRING VET

Dr. Turowsky

**INVOICE
24242**

**DATE
03/18/2026**



PATIENT

Max Trombino

SPECIES

Canine

BREED

French Bulldog

SEX

MN

AGE

14yr

WEIGHT

32lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Vincent Ravancho,
 CVT

HOSPITAL NAME

Millburn Vet Hospital

REFERRING VET

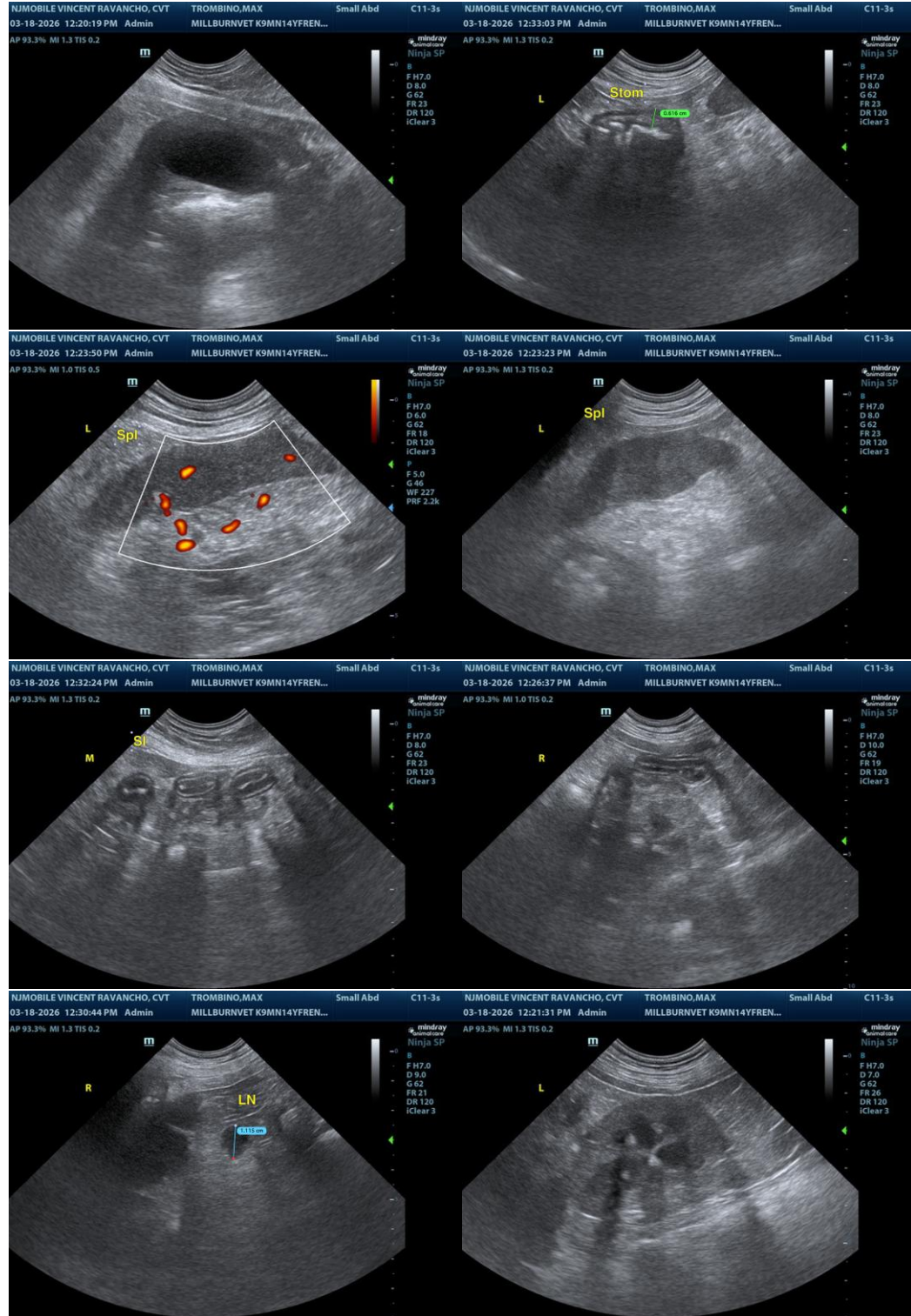
Dr. Turowsky

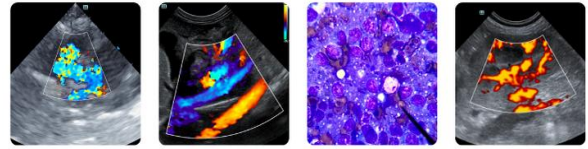
INVOICE

24242

DATE

03/18/2026





PATIENT

Max Trombino

SPECIES

Canine

BREED

French Bulldog

SEX

MN

AGE

14yr

WEIGHT

32lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Vincent Ravancho,
 CVT

HOSPITAL NAME

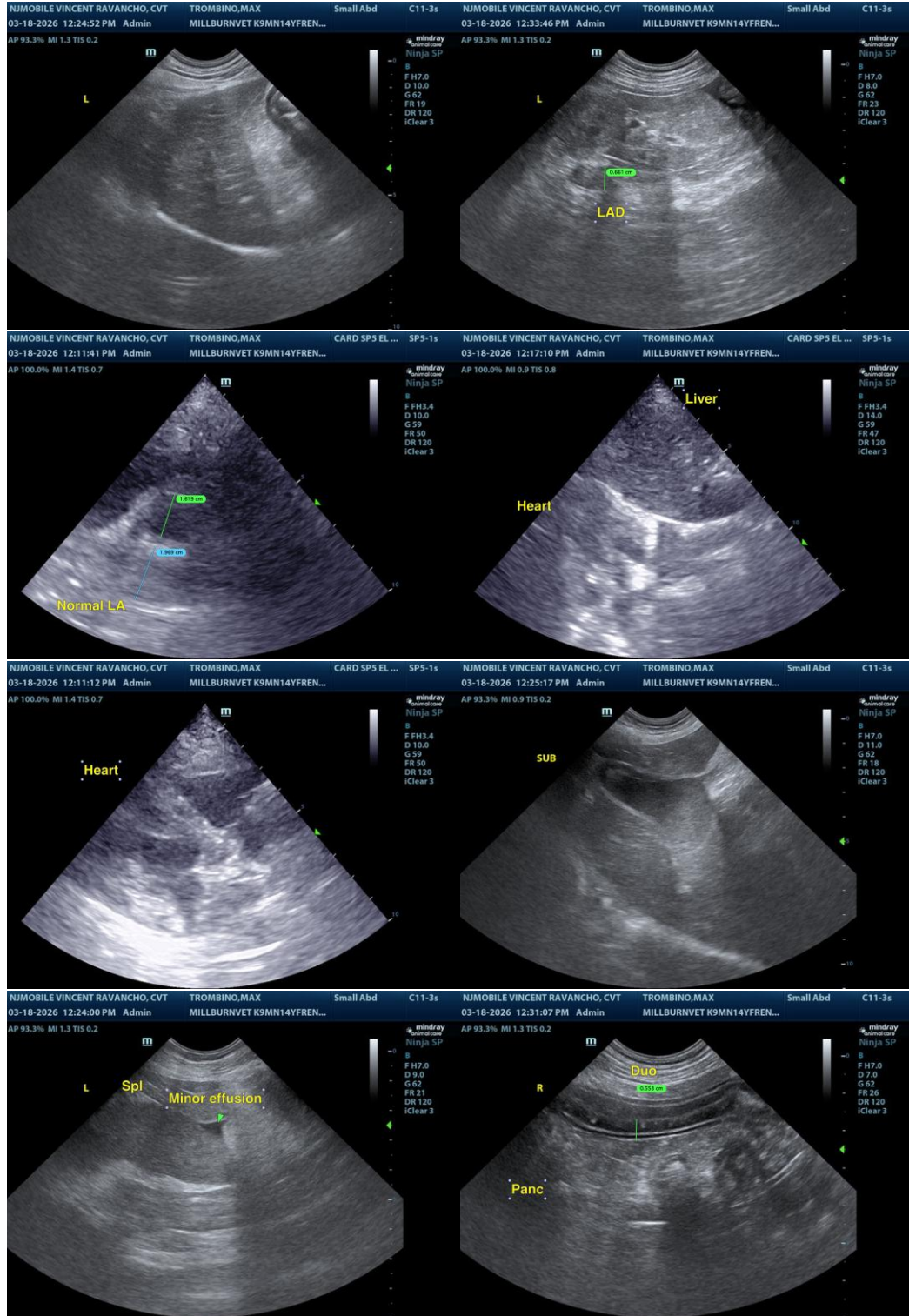
Millburn Vet Hospital

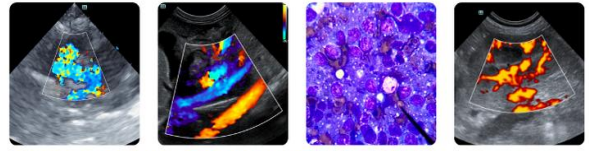
REFERRING VET

Dr. Turowsky

INVOICE
 24242

DATE
 03/18/2026





PATIENT

Max Trombino

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

French Bulldog

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

SEX

MN

AGE

14yr

WEIGHT

32lb

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Vincent Ravancho,
CVT

HOSPITAL NAME

Millburn Vet Hospital

REFERRING VET

Dr. Turowsky

INVOICE

24242

DATE

03/18/2026