



PATIENT	PRESENTING CLINICAL SIGNS
Bruno Arrendondo	Increased ALT/ALP findings. Current meds: Denamarin 425mg 1T PO q 24hrs Abnormal PE/Chem/CBC/UA Results: ALT 1350, ALP 1599
SPECIES	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Canine	Urinary System
BREED	The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.
Beagle	Prostate (neutered) is normal in size, echotexture and echogenicity for a neutered male.
SEX	The right kidney is normal in size (7.03 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.
Neutered Male	
AGE	The left kidney is normal in size (5.69 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.
7 Years	
WEIGHT	Adrenal Glands
42 Pounds	The right adrenal gland is normal in size (2.5 cm long x 0.98 cm at the cranial pole and 0.52 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.
INTERPRETED BY	The left adrenal gland is normal in size (2.22 cm long x 0.54 cm at the cranial pole and 0.63 cm at the caudal pole), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.
Beth Johnson, DVM DACVIM	
IMAGING PERFORMED BY	Spleen
Jessica Miller	The 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). A 1.0 cm non-capsule expanding, hypoechoic nodule is noted in the mid body of the spleen. Splenic vasculature appears normal.
HOSPITAL NAME	Liver
Vetco Total Care – Totowa	Liver is subjectively enlarged. Margins are smooth but round. It has a normal homogenous echotexture. Parenchyma is diffusely hyperechoic characterized by less prominent than normal portal vein walls and increased echogenicity relative to the spleen. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.
REFERRING VET	Gastrointestinal
Dr. Dean	The 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.
INVOICE	
39223	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.
DATE	
7/5/22	



PATIENT	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.
Bruno Arrendondo	
SPECIES	The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.
Canine	
BREED	Pancreas
Beagle	The pancreas is prominent (enlarged) in size and mildly irregular in shape with a slightly undulating contour. Parenchyma is coarse in echotexture and heterogenous to hypoechoic in echogenicity.
SEX	Free Abdomen
Neutered Male	There is no evidence of free peritoneal effusion noted in these images.
AGE	Pancreaticoduodenal and other cranial abdominal (possibly hepatic) lymph nodes are prominent in size with swollen capsular contour. Normal elongated shape (length to width ratio) is maintained. There is no loss of parenchymal detail.
7 Years	PRIMARY FINDINGS
WEIGHT	<ul style="list-style-type: none"> Hyperechoic hepatomegaly – This appearance is non-specific and most consistent with a benign steroid (endocrine) or vacuolar hepatopathy or reactive or idiopathic hepatopathy. Inflammatory and/or infiltrative disease (such as round cell neoplasia) are also possible, but considered less likely. Chronic active pancreatitis with a suspect acute component, given the reactive lymphadenopathy as well as mildly enhanced hyperechoic surrounding fat.
42 Pounds	SECONDARY FINDINGS
INTERPRETED BY	INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
Beth Johnson, DVM DACVIM	An obvious cause for the reported increased liver enzymes is not identified in these images. Microscopic disease such as Leptospirosis, bacterial cholangiohepatitis, chronic active hepatitis, copper-associated hepatotoxicity, other hepatotoxicity, infiltrative neoplasia (considered unlikely), etc. cannot be definitively ruled out.
IMAGING PERFORMED BY	Diagnostic recommendations include testing for Leptospirosis (if not recently evaluated) as well as a fine needle aspirate of the liver, if patient's coagulation status is appropriate. Other diagnostic recommendations include a gastrointestinal malabsorption panel (including cobalamin, folate, TLI and PLI) to Texas A&M GI Laboratory for further evaluation of GI and pancreatic function.
Jessica Miller	Finally, empirical therapeutic recommendations include broad-spectrum antibiotics as well as hepatic nutraceuticals such as Denamarin +/- Ursodiol and transition to a low-fat diet, given the pancreatic changes in these images, with monitoring of liver enzymes for improvement.
HOSPITAL NAME	
Vetco Total Care – Totowa	
REFERRING VET	
Dr. Dean	
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DATE	
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PATIENT

Bruno Arrendondo

SPECIES

Canine

BREED

Beagle

SEX

Neutered Male

AGE

7 Years

WEIGHT

42 Pounds

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Vetco Total Care –
Totowa

REFERRING VET

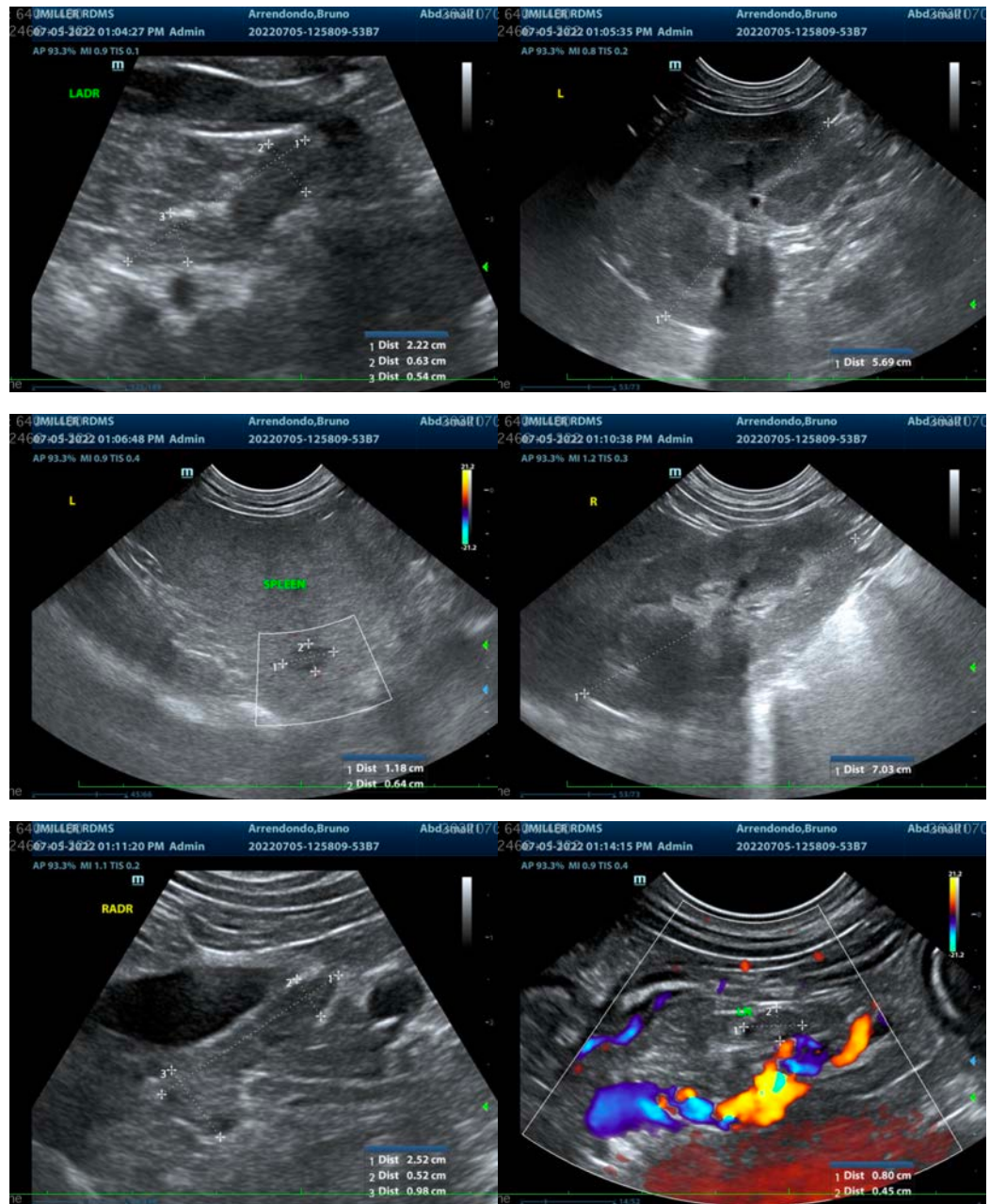
Dr. Dean

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PATIENT

Bruno Arrendondo

SPECIES

Canine

BREED

Beagle

SEX

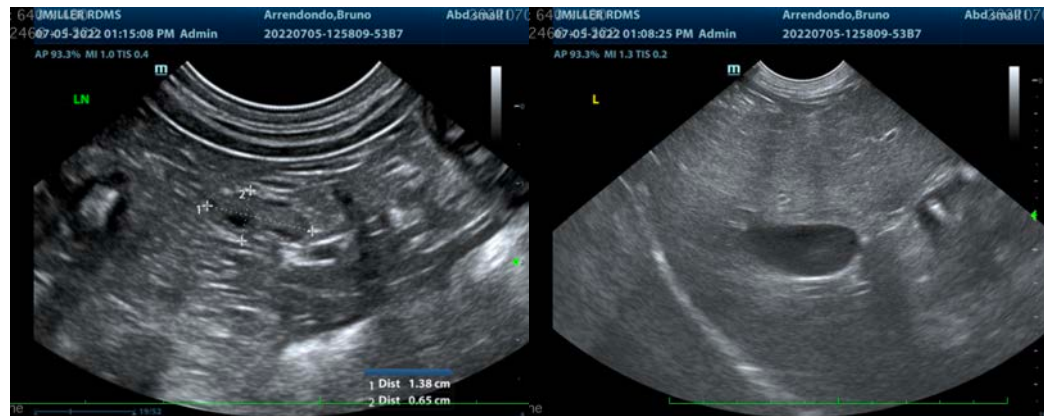
Neutered Male

AGE

7 Years

WEIGHT

42 Pounds



INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Jessica Miller

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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.

Beth Johnson, DVM, DACVIM
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