



PATIENT	PRESENTING CLINICAL SIGNS
Tuppence Munchrath	Enlarged spleen / liver palpated on physical and potbellied appearance. Abnormal PE/Chem/CBC/UA Results: Non recent blood work pending.
SPECIES	ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN
Canine	Urinary System
BREED	Urinary bladder is adequately distended with primarily anechoic contents and occasional echogenic non-shadowing debris. Apical urinary bladder wall is diffusely thick (0.27 cm thick). Mucosa is hyperechoic and irregular. No masses are observed. there is some mineral/sand debris along the dependent wall, and small punctuate cystoliths in small piles are suspected. The trigone and visible pelvic urethra are normal thickness with a smooth mucosal surface.
Terrier x	
SEX	Prostate is normal in size, echotexture and echogenicity for a neutered male.
Neutered Male	
AGE	Kidneys are overall normal in size and shape with smooth peripheral margination. A normal 1:3 cortex to medulla ratio is maintained. The medulla and cortices are uniform in texture with some mild increased cortical echogenicity and mild loss of corticomedullary distinction, expected in this age patient. There is no evidence of pyelectasia, mineral or infarcts observed. Small cortical cysts are noted bilaterally. The left kidney measured 4.39 cm. The right kidney measures 3.52 cm.
14	
WEIGHT	Adrenal Glands
6.3 kg	Adrenal glands are mildly plump/enlarged in size. Normal shape and contour are maintained without evidence of capsular invasion. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal. The left adrenal gland measures 0.56 cm at the cranial pole and 0.73 cm at the caudal pole. The right adrenal gland measures 0.52 cm at the cranial pole and 0.61 cm at the caudal pole.
INTERPRETED BY	Spleen
Beth Johnson, DVM DACVIM	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). No focal nodules or masses are observed. Splenic vasculature appears normal.
IMAGING PERFORMED BY	Liver
Dr. Belan	Liver is subjectively enlarged with mildly irregular margins. Parenchyma is heterogenous characterized by multiple poorly defined hypoechoic nodules within otherwise hyperechoic liver parenchyma. Visible vasculature and biliary tree appear normal without distension or congestion.
HOSPITAL NAME	Gastrointestinal
Signal Hill AH	Gallbladder is moderately distended with anechoic bile as well as suspended and gravity dependent echogenic debris. The wall is smooth without visible thickening. There is no evidence of cystic or CBD dilation. There is no evidence of effusion or inflammation.
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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.
Tuppence Munchrath	
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
Terrier x	The observed pancreas appears appropriately isoechoic to surrounding omental fat. The capsule is mildly irregular in shape. Parenchyma is mildly heterogenous and coarse. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.
SEX	Free Abdomen
Neutered Male	There is no evidence of free peritoneal effusion noted in these images.
AGE	There is no apparent lymphadenopathy noted in these images.
14	
WEIGHT	PRIMARY FINDINGS
6.3 kg	<ul style="list-style-type: none"> • Mild bilateral adrenomegaly – consistent with adrenal hyperplasia secondary to pituitary dependent hyperadrenocorticism vs stress or normal variant. Interpret in combination with clinical signs of hyperadrenocorticism.
INTERPRETED BY	<ul style="list-style-type: none"> • Heterogenous Liver – These changes are most consistent with benign processes such as nodular hyperplasia, steroid (vacuolar) hepatopathy, extramedullary hematopoiesis or possibly chronic inflammatory disease and less commonly infiltrative round cell or metastatic neoplasia.
Beth Johnson, DVM DACVIM	<ul style="list-style-type: none"> • Moderate gallbladder debris - Cholecystic debris is of unknown clinical significance. It can be seen with biliary stasis from fasting or illness. Cholecystic debris is not necessarily related to hepatobiliary disease. Echogenic bile is most commonly an incidental finding in dogs and should be interpreted in combination with clinical signs such as nausea, inappetence, cranial abdominal discomfort and/or laboratory changes such as increased ALP and/or increased Tbili.
IMAGING PERFORMED BY	<ul style="list-style-type: none"> • Chronic Cystitis with possible small cystoliths - Urinary bladder wall changes are most consistent with chronic cystitis. Infiltrative neoplasia cannot be ruled out but is considered less likely given the location and diffuse nature of the changes.
Dr. Belan	
HOSPITAL NAME	SECONDARY FINDINGS
Signal Hill AH	<ul style="list-style-type: none"> • Age related kidney changes
REFERRING VET	<ul style="list-style-type: none"> • Pancreatic age-related remodeling – Mild irregularities are consistent with benign age-related change. Low-grade smoldering chronic pancreatitis cannot be ruled out and should be suspected in the face of appropriate clinical signs.
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PATIENT

Tuppence Munchrath

SPECIES

Canine

BREED

Terrier x

SEX

Neutered Male

AGE

14

WEIGHT

6.3 kg

INTERPRETED BY

Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

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Signal Hill AH

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The described adrenal gland, liver and gallbladder changes are all suggestive of hyperadrenocorticism. If clinical signs of hyperadrenocorticism, such as polyuria, polydipsia, polyphagia, panting, hair loss, hypertension, etc. are present, testing for hyperadrenocorticism with a LDDS test is warranted. If a LDDS test has been evaluated with a normal result, investigation of possible atypical hyperadrenocorticism with a full ACTH stimulation adrenal panel to the University of Tennessee could be considered. If clinical signs are not present, monitoring is recommended with testing pursued when/if clinical signs develop. If not recently evaluated, blood pressure is recommended. If not recently evaluated, a urinalysis and, if indicated based on urinalysis results, urine culture are also recommended. If protein is present in an otherwise quiet sediment, protein quantification with a urine protein to creatinine ratio is recommended.





PATIENT

Tuppence Munchrath

SPECIES

Canine

BREED

Terrier x

SEX

Neutered Male

AGE

14

WEIGHT

6.3 kg

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Beth Johnson, DVM
DACVIM

IMAGING PERFORMED BY

Dr. Belan

HOSPITAL NAME

Signal Hill AH

REFERRING VET

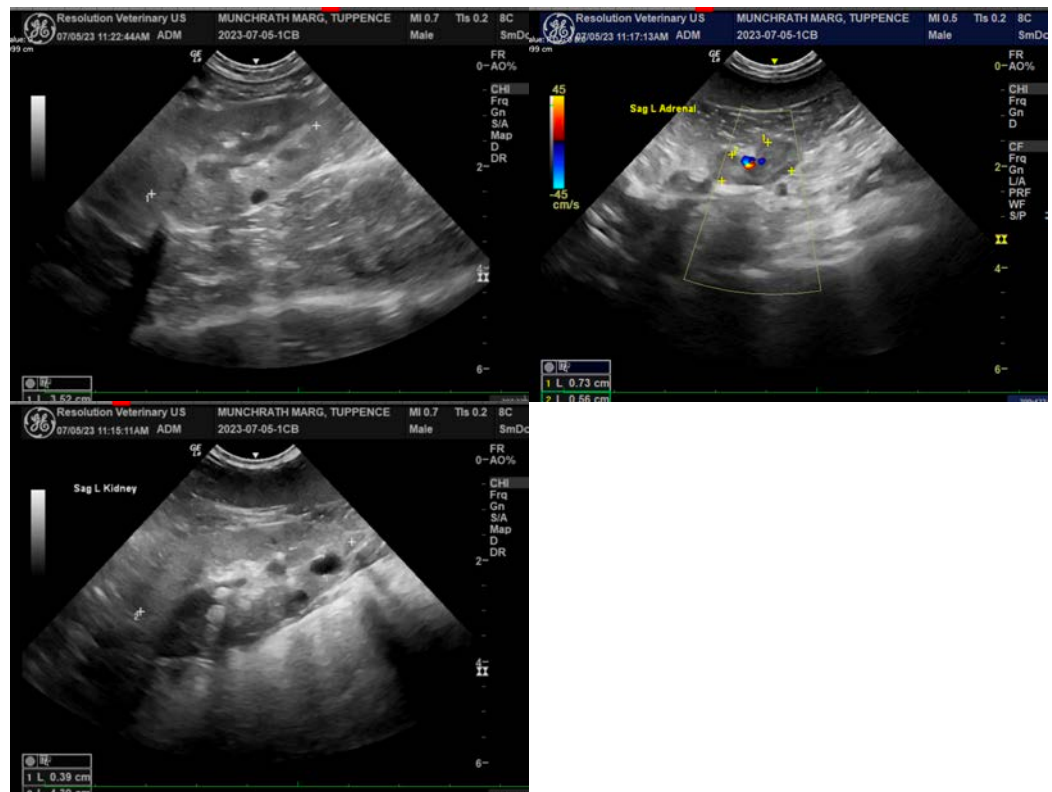
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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