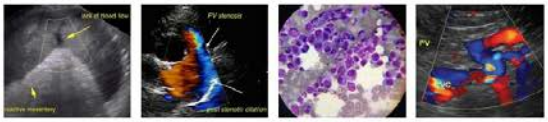
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



IMAGING PERFORMED BY
pawsonography@gmail.com 530-786-8340

PATIENT

Nova Murphy

SPECIES

Canine

BREED

Shepherd X

SEX

Spayed Female

AGE

7 Years

WEIGHT

78 Pounds

INTERPRETED BY

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

IMAGING BY

Loetitia Saint-Jacques, LVT

HOSPITAL NAME

Desert Hills AH

REFERRING VET

Dr. Amanda Coats

INVOICE

42265

DATE

10/20/22

PRESENTING CLINICAL SIGNS

Chief Concern/Provisional Diagnosis: P has been PU/PD. Low dose dex suppression test did NOT support Cushing's. P has a history of degenerative retinas, O has noted her eyesight seemed to be declining rapidly recently-looking for anything abnormal with P's ultrasound. History / Physical Findings: Mild pot bellied appearance Labwork: 9/2/22: Superchem- ALT=184, Alk Phos=213. Calcium=11.6, PSL=166-suspect NSF as no GI signs & P NOT fasted CBC- Hgb=21.9, Hct=67% T4=2.3-WNL Urinalysis SG 1.017 pH=7.5 Protein 3+ occult Blood 2+, RBC 4-10-difficult cystocentesis WBC=21-50, Bacteria=Rods >100 UPC Ratio=3.5-High Treated for UTI with Amoxicillin 500 mg BID x 14 days, Urine Culture 9/23/22=Negative LDDST Pre=7.7 4 hour post=1.1 8 hour post=0.5 -Does not support hyperadrenocorticism Current Therapy and Medications : None

Abnormal PE/Chem/CBC/UA Results: sedation dex/torb

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 left kidney has a normal shape and size (7.12 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 (7.32 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

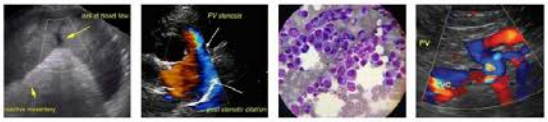
The left adrenal gland is normal in size measuring 0.40 cm at the caudal pole. It is observed in its normal position cranial to the left renal artery. It is normal in appearance (uniformly hypoechoic) and shape with no evidence of a mass effect.

The right adrenal gland is normal in size measuring 0.48 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 borderline large. The spleen echotexture is heterogenous and mildly mottled, 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.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



IMAGING PERFORMED BY
pawsonography@gmail.com 530-786-8340

PATIENT

Nova Murphy

SPECIES

Canine

BREED

Shepherd X

SEX

Spayed Female

AGE

7 Years

WEIGHT

78 Pounds

INTERPRETED BY

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

IMAGING BY

Loetitia Saint-Jacques, LVT

HOSPITAL NAME

Desert Hills AH

REFERRING VET

Dr. Amanda Coats

INVOICE

42265

DATE

10/20/22

Liver

The liver is subjectively normal in size, and echogenicity with smooth peripheral margins. The parenchyma is homogenous echotexture. The visible portions of the vasculature and biliary tract appear normal. No focal nodules or cystic lesions are observed.

The gallbladder lumen is moderately distended. The wall of the gall bladder is not thickened and has a smooth mucosal surface. Luminal contents are mild and primarily anechoic. The cystic and common bile ducts are normal/not visible.

Gastrointestinal

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.

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 0.45 cm. Jejunum wall measured 0.36 cm. Visualized peristalsis appears appropriate. There were no focal lesions consistent with obstruction or a mass effect observed.

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.

Pancreas

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

Free Abdomen

Evaluation of the peritoneal cavity did not reveal any evidence of effusion. The sublumbar lymph nodes are visualized and the left appears slightly prominent and 0.93 cm. The right measures at 0.59 cm. The omentum is generally of normal echogenicity.

Other

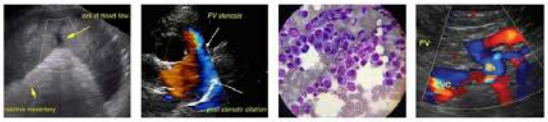
A brief view of the heart was submitted. No significant pericardial effusion was seen.

ULTRASONOGRAPHIC FINDINGS

- Prominent, mildly mottled spleen – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis. This is relatively mild and could be within normal limits for this individual.

- Prominent, mottled pancreas – The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



IMAGING PERFORMED BY
pawsonography@gmail.com 530-786-8340

PATIENT

Nova Murphy

SPECIES

Canine

BREED

Shepherd X

SEX

Spayed Female

AGE

7 Years

WEIGHT

78 Pounds

INTERPRETED BY

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

IMAGING BY

Loetitia Saint-Jacques, LVT

HOSPITAL NAME

Desert Hills AH

REFERRING VET

Dr. Amanda Coats

INVOICE

42265

DATE

10/20/22

- Prominent sublumbar lymph nodes – The prominent abdominal lymph nodes are most consistent with reactive lymphadenitis or lymphoid hyperplasia. Neoplastic infiltration is considered less likely.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No obvious focal lesions responsible for the PU/PD reported are visualized. The spleen subjectively appears slightly large and mottled. This could be within normal limits. A fine needle aspirate could be considered.

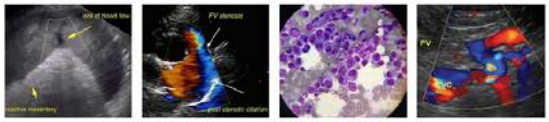
Additionally, the pancreas is somewhat prominent and mottled, but there is no significant surrounding inflammation. This is likely consistent with previous episodes of pancreatitis/pancreatic remodeling.

The sublumbar lymph nodes appear slightly prominent but not overtly enlarged and they are isoechoic. Recommend a digital rectal exam to palpate the anal glands and continued monitoring.

Given the liver enzyme elevations present, I would consider screening for Leptospirosis and performing a liver function test. If liver function is abnormal, I would recommend a liver biopsy. Additionally, I would recommend a urinalysis and culture due to the history of UTI. Below I will include a list of differentials for PU/PD that I go through to try to rule in/out possible causes.

Diabetes Mellitus
Chronic Renal Disease/Renal Failure (can present pre-azotemic, especially in dogs, but expect the BUN & creatinine not to be at the low end of the reference range)
Hypercalcemia
Urinary tract infection
Iatrogenic Disease due to medications (diuretics, phenobarbital, KBr; diets either high in salt [such as S/D] or very low in protein (such as U/D))
Hyperthyroidism
Hypokalemia
Liver Disease (hepatic encephalopathy may be a mixed primary PU and PD)
Pyelonephritis
Polycythemia
Renal Tubular Diseases (glycosuria or Fanconi & Fanconi-like syndromes or RTA)
Hyperadrenocorticism (may be a mixed primary PU and PD)
Hypoadrenocorticism (either Addison's or hypocortisolism)
Paraneoplastic Syndromes (particularly splenic hemangiosarcoma?)
Pericardial Effusion
Pyometra (including stump pyometra in spayed dogs)
Chronic Partial Urinary Obstruction or Post-Obstructive Diuresis
Pheochromocytoma
Psychogenic Polydipsia (as in a true behavior disorder with a compulsive element)
Primary Non-Medical Polydipsia (aka "I drink a lot because I like it or I engage in activities that promote it, but that doesn't mean I'm sick")
Primary Nephrogenic Diabetes Insipidus (Congenital Nephrogenic Diabetes Insipidus, other diseases that cause primary PU other than Congenital Diabetes Insipidus would be considered Acquired Nephrogenic Diabetes Insipidus)
cion

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



IMAGING PERFORMED BY
pawsonography@gmail.com 530-786-8340

PATIENT

Nova Murphy

Atypical Cushing's and SARDS
Central Diabetes Insipidus

SPECIES

Canine

BREED

Shepherd X

SEX

Spayed Female

AGE

7 Years

WEIGHT

78 Pounds

INTERPRETED BY

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

IMAGING BY

Loetitia Saint-Jacques, LVT

HOSPITAL NAME

Desert Hills AH

REFERRING VET

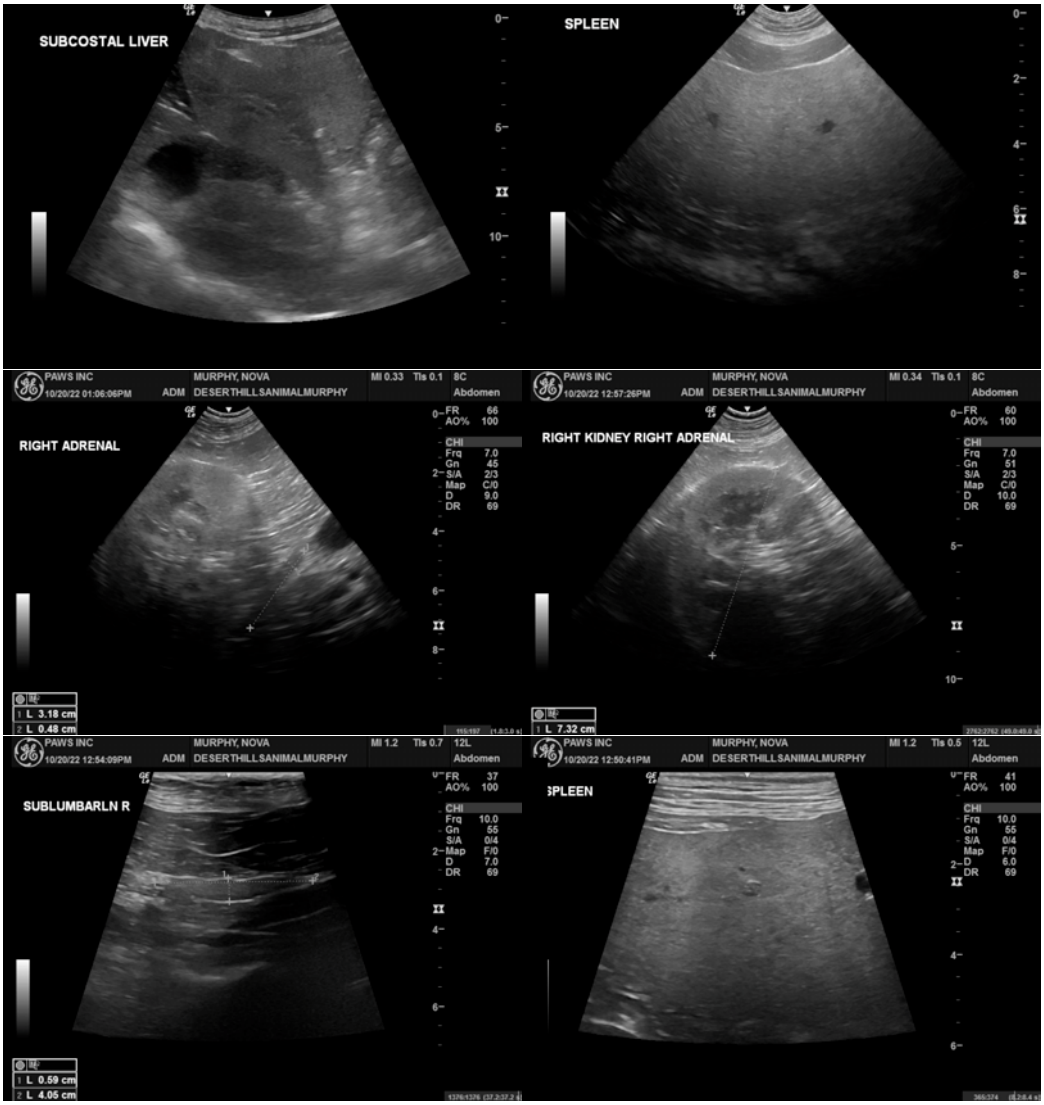
Dr. Amanda Coats

INVOICE

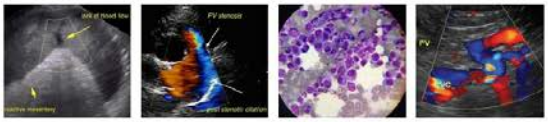
42265

DATE

10/20/22



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



IMAGING PERFORMED BY
pawsonography@gmail.com 530-786-8340

PATIENT

Nova Murphy

SPECIES

Canine

BREED

Shepherd X

SEX

Spayed Female

AGE

7 Years

WEIGHT

78 Pounds

INTERPRETED BY

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

IMAGING BY

Loetitia Saint-Jacques, LVT

HOSPITAL NAME

Desert Hills AH

REFERRING VET

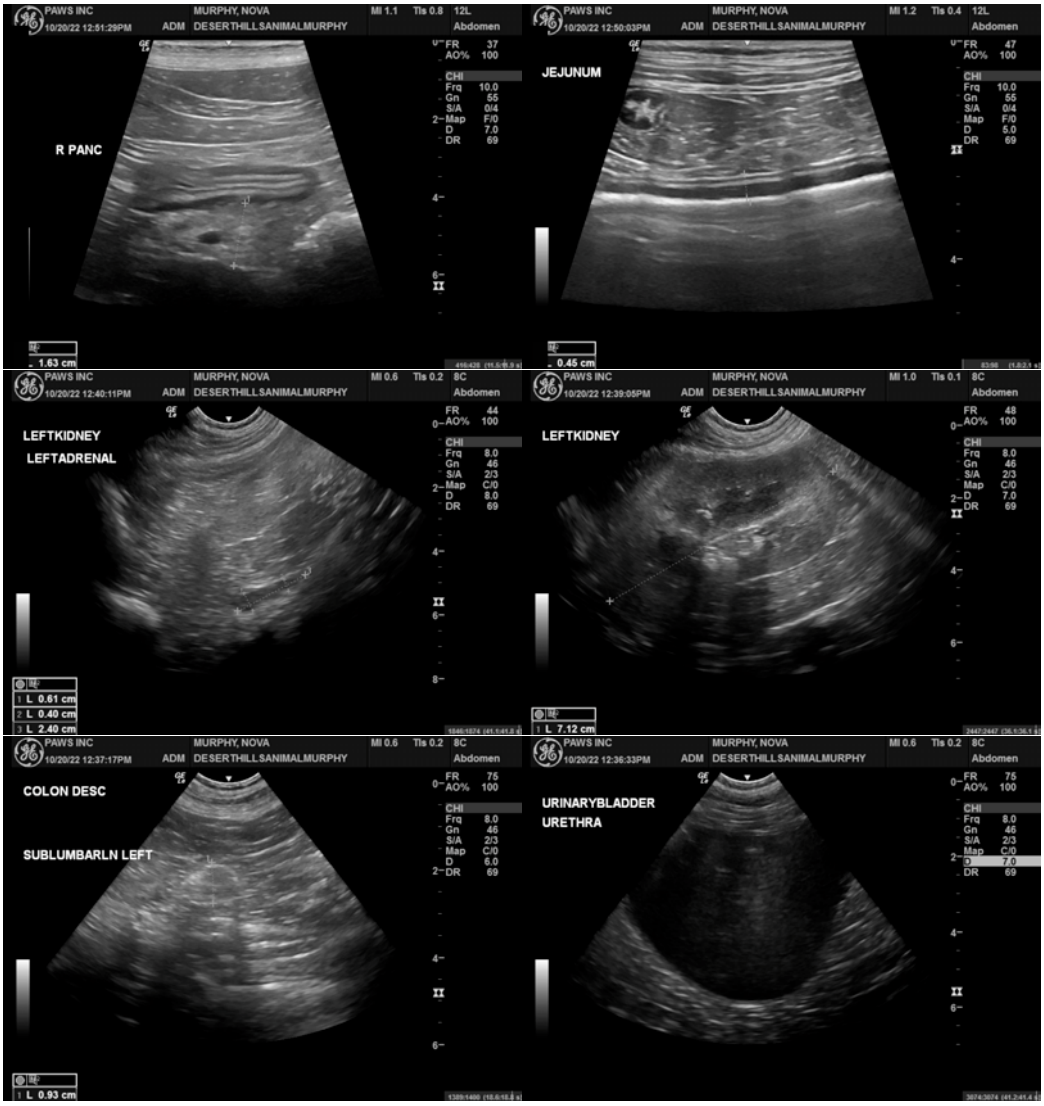
Dr. Amanda Coats

INVOICE

42265

DATE

10/20/22



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.

Kathleen Sennello DVM,MS, Diplomate ACVIM (Small animal Internal Medicine)
kathleen.sennello@sonopath.com