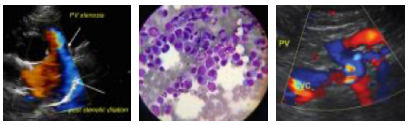
IMAGING PERFORMED BY

IntraPet.com



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

DATE

12/7/2021

PATIENT

Hayley Ling

SPECIES

Canine

BREED

Dachshund

SEX

Female, spayed

AGE

8/17/2011

WEIGHT

14.6 lbs.

INTERPRETED BY

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)

IMAGING PERFORMED BY

Rachel Brilhart RDMS

HOSPITAL NAME

Animal Emergency Hospital

REFERRING VET

Dr. Willer

INVOICE
12681

PRESENTING CLINICAL SIGNS

History: Presenting Complaint: Vomiting. Date: 12-05-2021 Notes: PC: vomiting ATO: known history of Cushing's, blind, 3-day hx of vomiting; started once a day and progressed to 4x yesterday. O knows she has a pot belly, likely due to the Cushing's; but has noticed pronounced weight loss along her spine recently Last had bloodwork about 6mos ago--no concerns other than Cushing's. Diarrhea is on and off, sometimes it is soft, sometimes it has mucus and blood. On and off; no pattern. Diarrhea issue started about 1.5 yrs ago, which was worked up by rdvm, discussed possible flare up of Cushing's as the cause Pu/pd at home. Hx of gallbladder sludge; a few years ago, here for this issue, started on Ursodiol. Eating and drinking well at home; O offers different foods, Hill's dry, Rachel Ray wet, Purina wet. New food introduced 3 days ago (Stella and Chewy wet), not affecting the other dogs at home. With medications she gets low sodium turkey, no other human food Does not get into anything meds last got yesterday evening; Ursodiol BID, Gaba SID at pm, Trilostane BID, Amlodipine, Benazepril, and Clopidogrel.
Plan: Discussed PE; nervous, belly is full which could be from the Cushing's or other. Discussed new diet change could be affecting her, also pancreatitis possible. Weight loss could be liver, kidney, or cancer.
Plan: start with full bloodwork, pcv/ts, and x-rays.

Current Medications: Cerenia, Pantoprazole, Ampicillin, Ursodiol BID, Gaba SID at pm, Trilostane BID, Amlodipine, Benazepril, and Clopidogrel.
Lab Results: CBC WNL, creatinine 4.9, BUN off the scale, hyperphosphatemic, AlkP 302, blood pressure 160 systolic, urine sediment inactive. USG 1.014, trace proteinuria.
Radiographs: Xray Abdomen 2 View- decreased detail in the cranial abdomen- do not know if there is a mass effect vs the way the kidneys are laying age related changes to the lungs.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder, trigone, and pelvic urethra are normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 2 cm, are normal.

The left kidney is normal size (4.24 cm in length) with a slightly irregular shape. The cortex is mildly thickened and hyperechoic and there is mild to moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Pinpoint hyperechoic foci are also seen within the cortex. Moderate pyelectasia is present (0.57 cm in the longitudinal plane). A cortical infarct is observed at the caudal +/- cranial pole. A few cortical cysts are visualized. There is no evidence of hydroureter. Renal vasculature is normal.

The right kidney is normal size (5.15 cm in length); normal shape and architecture with smooth peripheral margins. The cortex is mildly thickened and hyperechoic and there is mild to moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Pinpoint hyperechoic foci are also seen within the cortex. Moderate pyelectasia is present (0.33 cm in the longitudinal plane). There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is enlarged (0.69 cm at cranial pole) (0.81 cm at caudal pole) (2.59 cm in length) with a slightly irregular shape. The parenchyma is slightly heterogeneous with loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is enlarged (1.04 cm at cranial pole) (1.09 cm at caudal pole) (2.11 cm in length) with an irregular shape. The parenchyma is slightly heterogeneous with loss of glandular detail. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (0.87 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

Liver

The liver is subjectively normal in size with normal curvilinear peripheral contours. The parenchyma is hypoechoic relative to the spleen and slightly mottled in appearance. A 0.63 cm cystic lesion is observed mid to right liver. The hepatic vasculature is slightly dilated. Intrahepatic biliary tracts are normal. The portal vein: caudal vena cava ratio is approximately 1:1. The gall bladder lumen is moderately distended. The wall is normal in thickness. A large amount of aggregated echogenic sludge fills the lumen. The cystic duct is dilated (up to 0.62 cm) with some aggregated echogenic debris observed within the lumen. The common bile duct can be followed to the level of the duodenal papilla and is not overtly dilated (0.26 cm in diameter at the level of the duodenal papilla).

Gastrointestinal

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. No obstructive disease is noted.

Pancreas

The right limb of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely hyperechoic relative to surrounding omental fat and slightly mottled in appearance. The pancreatic duct is visible but not overtly dilated. There is no evidence of peripancreatic inflammation or effusion.

Free Abdomen

There is no evidence of free fluid. The abdominal lymph nodes are normal/not visible.

Other

A few ring down lesions are suspected in the thorax.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

- Based on the clinical history and sonographic changes, acute-on-chronic renal failure is suspected. The bilateral pyelectasia is concerning for pyelonephritis. However, age-related remodeling and fluid therapy can also result in this finding.
- Gallbladder sludge with debris in the cystic duct. Differentials include cholestasis, early mucocele formation or secondary to fasting (less likely).
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.

Secondary Findings:

- The bilateral adrenomegaly is consistent with the previous diagnosis of pituitary dependent hyperadrenocorticism.
- The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, regenerative nodular hyperplasia, and/or age-related remodeling. Inflammatory and infiltrative disease are considered less likely.
- The mildly dilated hepatic vessels may be a normal variant for this patient or may represent an increase in hydrostatic pressure (i.e., due to fluid overload or congestive heart failure).
- The suspected ring down lesions in the thorax are suggestive of pulmonary parenchymal disease.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Three-view thoracic radiographs are recommended to assess cardiopulmonary status.
- A urine culture and sensitivity is recommended, preferably on a pre-antibiotic sample.
- A UPC should also be considered.
- Supportive care for acute on chronic renal failure is recommended while awaiting test results. Therapy could include IV fluids, empirical treatment for pyelonephritis (i.e., a fluoroquinolone), gastric protectants and antiemetics.


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3s
12-07-2021 01:25:18 PM Admin
AEHhlk9dachsf2011
Rt Kidney
mindray


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3s
12-07-2021 01:26:32 PM Admin
AEHhlk9dachsf2011
Bladder
mindray


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3s
12-07-2021 01:27:57 PM Admin
AEHhlk9dachsf2011
Spleen
mindray


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3s
12-07-2021 01:29:28 PM Admin
AEHhlk9dachsf2011
Pancreas
Dist 1.69 cm
mindray


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3s
12-07-2021 01:25:55 PM Admin
AEHhlk9dachsf2011
Rt adr
Dist 2.11 cm
Dist 1.09 cm
Dist 1.04 cm
mindray


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3s
12-07-2021 01:26:15 PM Admin
AEHhlk9dachsf2011
CAUD
SI
Dist 0.42 cm
mindray


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3s
12-07-2021 01:27:41 PM Admin
AEHhlk9dachsf2011
Lt ADR
Dist 2.59 cm
Dist 0.81 cm
Dist 0.69 cm
mindray


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3s
12-07-2021 01:23:49 PM Admin
AEHhlk9dachsf2011
Liver
GB
mindray


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3i
12-07-2021 01:23:57 PM Admin
AEHhlk9dachsf2011
mindray
Liver
Cystic duct


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3i
12-07-2021 01:24:06 PM Admin
AEHhlk9dachsf2011
mindray
Liver


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3i
12-07-2021 01:24:17 PM Admin
AEHhlk9dachsf2011
mindray
Liver


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3i
12-07-2021 01:27:08 PM Admin
AEHhlk9dachsf2011
mindray
Lt Kidney


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3i
12-07-2021 01:28:18 PM Admin
AEHhlk9dachsf2011
mindray
Stomach


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3i
12-07-2021 01:28:57 PM Admin
AEHhlk9dachsf2011
mindray
RT CR
Cyst


IntraPet Imaging RBIILLC
ling,hayley
Abd small I
C11-3i
12-07-2021 01:28:54 PM Admin
AEHhlk9dachsf2011
mindray
RT CR
Ring downs

The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

Andrea Nicastro, DVM, Diplomate ACVIM (*Small Animal Internal Medicine*)
Andrea.nicastro@sonopath.com