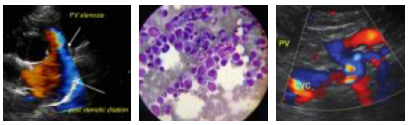
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE

2/7/2022

PATIENT

Diamond Fleetwood

SPECIES

Canine

BREED

Pug

SEX

Female, spayed

AGE

8/15/2008

WEIGHT

19.88 lbs.

INTERPRETED BY

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

HOSPITAL NAME

Everhart VH

REFERRING VET

Dr. Notarangelo

INVOICE

12962

PRESENTING CLINICAL SIGNS

History: Known diabetic with good control in December of 2021
1/31/22: presented for routine glucose curve, poor control shown, adjusted insulin. 2/3/22: presented for ADR/vomiting/urinary accidents, diagnosed with DKA, pancreatitis and UTI, started hospitalization/supportive IV fluids, insulin, antibiotics, antiemetics.
2/5/22: pet presented for continued care. After initial exam, pet experienced syncopal event. Concern for cardiac event vs other. Pet has not been very responsive to insulin. Average blood sugars 500 to 700. Advise bicavitary to assess GI organs/pancreas in addition to heart.

Current Medications: Enrofloxacin Clavamox Cerenia Metronidazole
Lab Results: 2/5/22: ALKP 486, glu 405, lip 2615, chol 405 K+ 3.3 , Cl 102. 2/3/22: ALKP 414, amyl 1833, crea 2.1, BUN 34, chol 413 glu 625, lip >6000, CL 92 5/28/21: ALKP 557, glu 429, chol 352, Cl 97, lip 3094 K+ 3.4.
Date of Previous IntraPet Ultrasound: No previous IntraPet scans.
Sedation: Not required to complete full diagnostic ultrasound.
Stat Report: Not requested.
Imaging Performed By: Rachel Brilhart, RDMS.

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 (4.43 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. Mild pyelectasia is present (0.29 cm in the transverse plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (5.05 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. Trace pyelectasia is present (0.16 cm in the transverse plane). There is no evidence of nephroliths, infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.80 cm at cranial pole) (0.86 cm at caudal pole) (2.14 cm in length) with a relatively normal shape. A 0.83 x 0.35 cm ill-defined, hyperechoic nodule is observed at the cranial aspect. The glandular echogenicity and detail at the caudal aspect are unremarkable. The phrenicoabdominal vein and surrounding vasculature are normal.

The right adrenal gland is mildly enlarged (0.75 cm at cranial pole) (0.79 cm at caudal pole) (2.20 cm in length); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

Spleen

The spleen is normal in size (1.02 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 enlarged with slightly swollen peripheral contours. The parenchyma is hyperechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion. The gall bladder lumen is moderately distended. The wall is thin and smooth. A small amount of aggregated echogenic partially dependent debris is observed within the lumen. The cystic and common bile ducts are normal/not seen. The gall bladder lumen is distended. The wall is thin and smooth. A large amount of aggregated echogenic suspended sludge in a partially stellate pattern is observed within the lumen. The cystic and common bile ducts are normal/not seen.

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/prominent with minimal deviation from the normal peripheral contours. The parenchyma is hypoechoic relative to surrounding omental fat. No distinct focal lesions are observed. The pancreatic duct is not overtly dilated.

Free Abdomen

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

Other

A uterine stump is visible (0.79 cm in width). No obvious pathology is noted.

ULTRASONOGRAPHIC FINDINGS

Primary Findings:

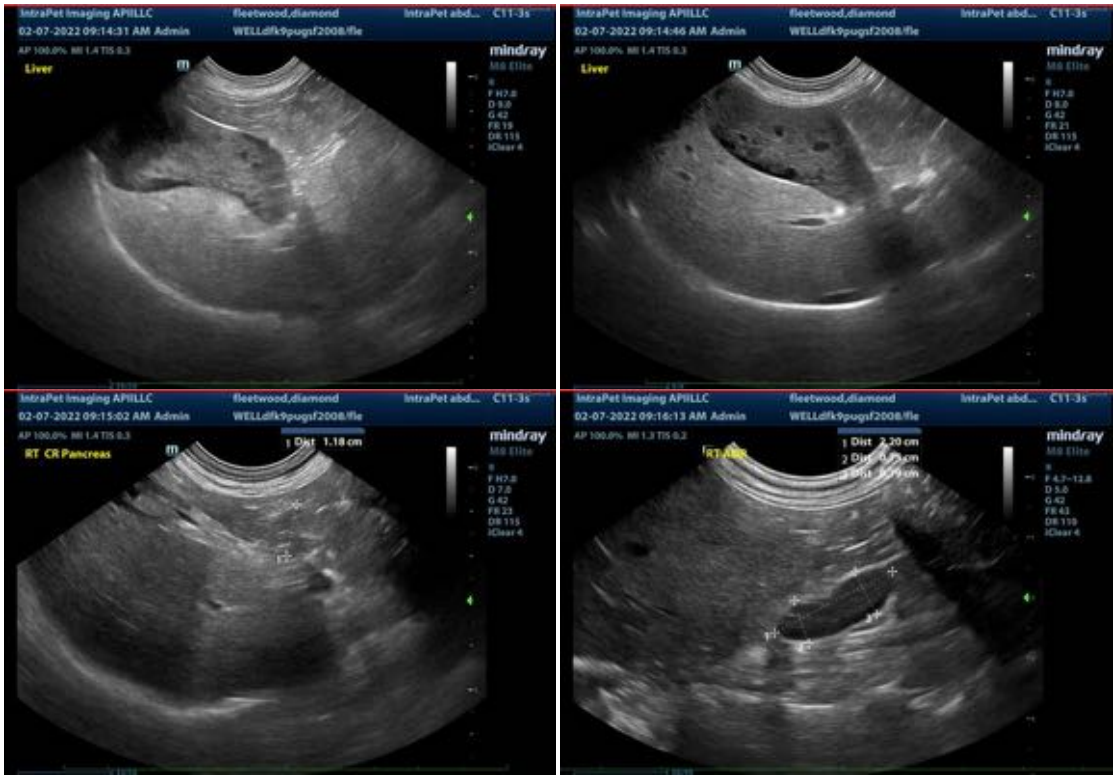
- Mild bilateral adrenomegaly. The left adrenal nodule is most consistent with nodular hyperplasia with a lower possibility of emerging neoplasia.
- The gallbladder changes are consistent with a developing mucocele.
- The hepatic parenchymal changes are likely secondary to vacuolar hepatopathy (i.e., due to diabetes mellitus), however, inflammatory disease or infiltrative neoplasia cannot be completely excluded. Neoplasia is considered less likely.
- The pancreatic changes may be a normal variant for this patient or could be consistent with mild, chronic pancreatitis. Correlation with clinical findings is recommended.

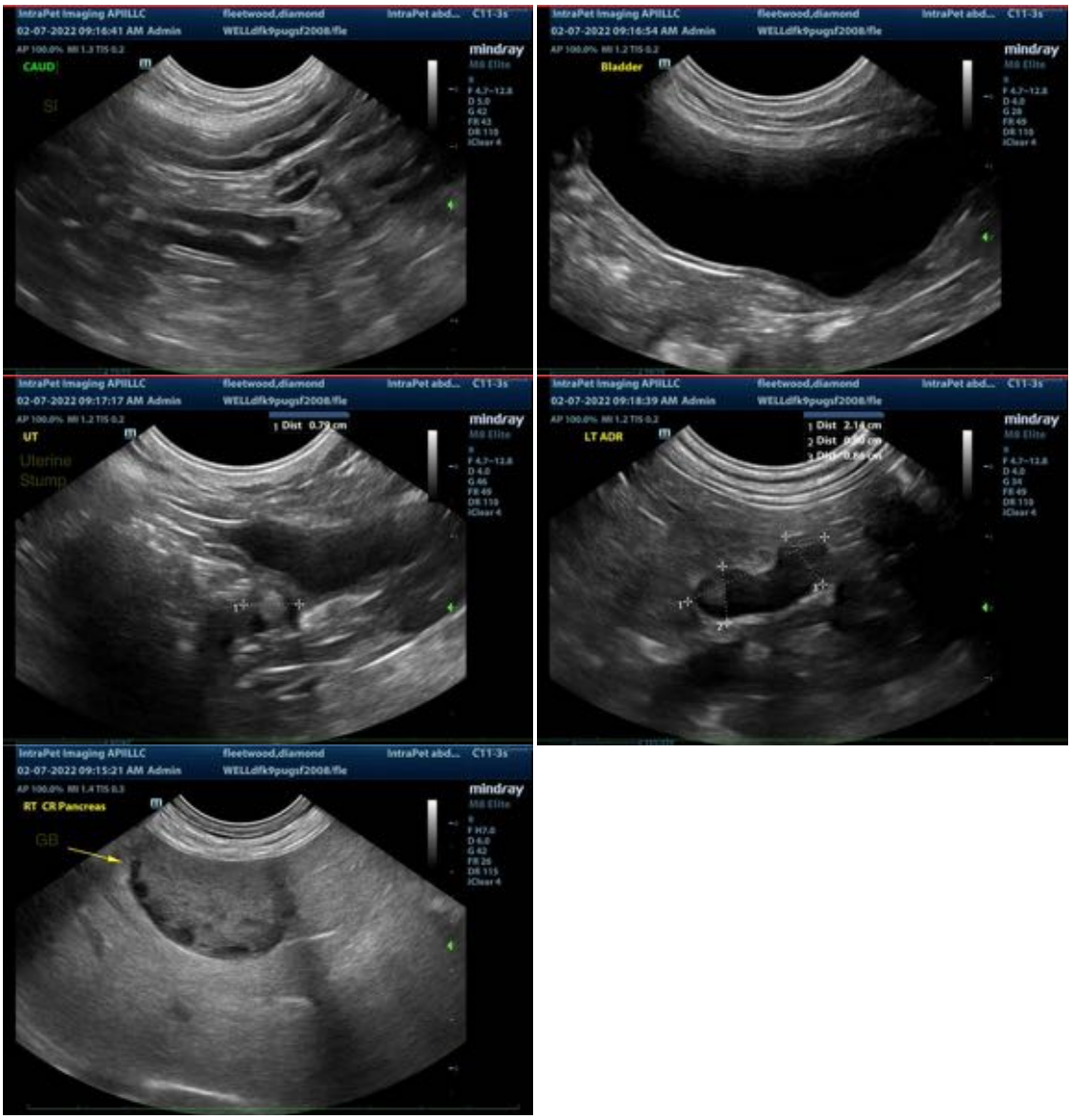
Secondary Findings:

- Minor degenerative renal changes. The bilateral pyelectasia may be secondary to IV fluid therapy, PU/PD and/or pyelonephritis.
- Visible uterine stump.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Continued supportive care and broad-spectrum antibiotic therapy is recommended.
- Once the patient has stabilized, consider further testing for Cushing's disease (i.e., low dose Dexamethasone suppression test or ACTH stimulation test).
- Three-view thoracic radiographs are also recommended, if not already performed.
- A urine culture and sensitivity, preferably on a pre-antibiotic sample (or 5-7 days after the last dose of antibiotics), should be considered to assess for appropriate antibiotic choice and persistent infection, respectively.
- Given the gall bladder changes, Ursodeoxycholic acid (Ursodiol) at 10-15 mg/kg once a day is recommended. Serial sonographic monitoring (e.g., every 6-8 weeks) of the gall bladder is recommended to assess for progression to a fully-formed mucocele.





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*)
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