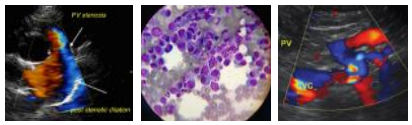
IMAGING PERFORMED BY

IntraPet.com



SonoPath
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DATE

2/9/2022

PATIENT

Bentley Wolfe

SPECIES

Canine

BREED

Australian Shepherd

SEX

Male Neutered

AGE

7-24-2011

WEIGHT

86.5 Lbs.

INTERPRETED BY

Andrea Nicastro, DMV, Diplomate DACVIM (Small Animal Internal Medicine)

HOSPITAL NAME

Taylorsville Veterinary Clinic

REFERRING VET

Dr. Lucas

INVOICE

10301

PRESENTING CLINICAL SIGNS

History: Vomiting for two days a green bile. Polyuria for about a year. Discussed with owner that patient had a hypercalcemia in August and patient has continued to be polydipsic (profound per owner) and polyuric (accidents in the house). I discussed with owner that these clinical signs are likely secondary to hypercalcemia as a high total calcium triggers the thirst center. Suspect that urinary calculi are calcium in nature due to increased calcium elimination from kidneys and precipitating. These may be resulting in stranguria due to physical inflammation. Cause for vomiting is not identified and could be due to dietary indiscretion vs secondary to liver mass or hypercalcemia. My concern is that primary underlying cause for persistent hypercalcemia is neoplasia. Most common location would be an apocrine anal sack carcinoma, although none identified upon rectal. Other causes would be lymphoma and liver enlargement may be infiltration as could soft tissue opacity in sublumbar area (lymph nodes). I recommend abdominal ultrasound to rule out evidence of abdominal neoplasia. Owner elects to treat vomiting symptomatically with bland diet and famotidine.

Current Medications: Famotidine 20 mg tablets: Give 2 tablets by mouth once daily to decrease acid production
Lab Results: Attached separately.
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.

Additional History: CBC unremarkable. Hypercalcemic at 13.8. The rest of the chemistry panel is unremarkable.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended. The wall is normal in thickness with a smooth mucosal surface. Numerous varying-sized cystic calculi are present within the lumen. The region of the trigone visible portion of the proximal urethra are normal.

The prostate is normal in size (1.26 cm in width) and shape. Parenchyma is homogenous. The prostatic urethra appears normal without evidence of dilation or obstruction.

The left kidney is normal size (7.49 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. A 1.01 cm cortical cyst is observed at the cranial medial aspect. Several nonobstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal size (6.87 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. Several nonobstructive nephroliths are visualized. Mild to moderate pyelectasia is present (0.39 cm in the longitudinal plane). There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is normal size (0.76 cm at cranial pole) (0.80 cm at caudal pole) (3.32 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.

The right adrenal gland is normal size (0.63 cm at cranial pole) (0.69 cm at caudal pole) (2.37 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 (1.62 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 slightly mottled 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 moderate amount of echogenic debris is observed within the lumen, most of which is gravity dependent and some of which is suspended.

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 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 or overt infiltrative disease is noted.

Pancreas
The base and limbs of the pancreas is visible with normal curvilinear peripheral contours. The parenchyma is largely isoechoic 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
The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- Cystic calculi
- Bilateral degenerative renal changes with nonobstructive nephrolithiasis and right pyelectasia

**An obvious cause for the patient's GI signs is not identified in this study. Differentials include side effect of hypercalcemia, low-grade pancreatitis, primary gastrointestinal disease, other.

Secondary Findings

- 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.

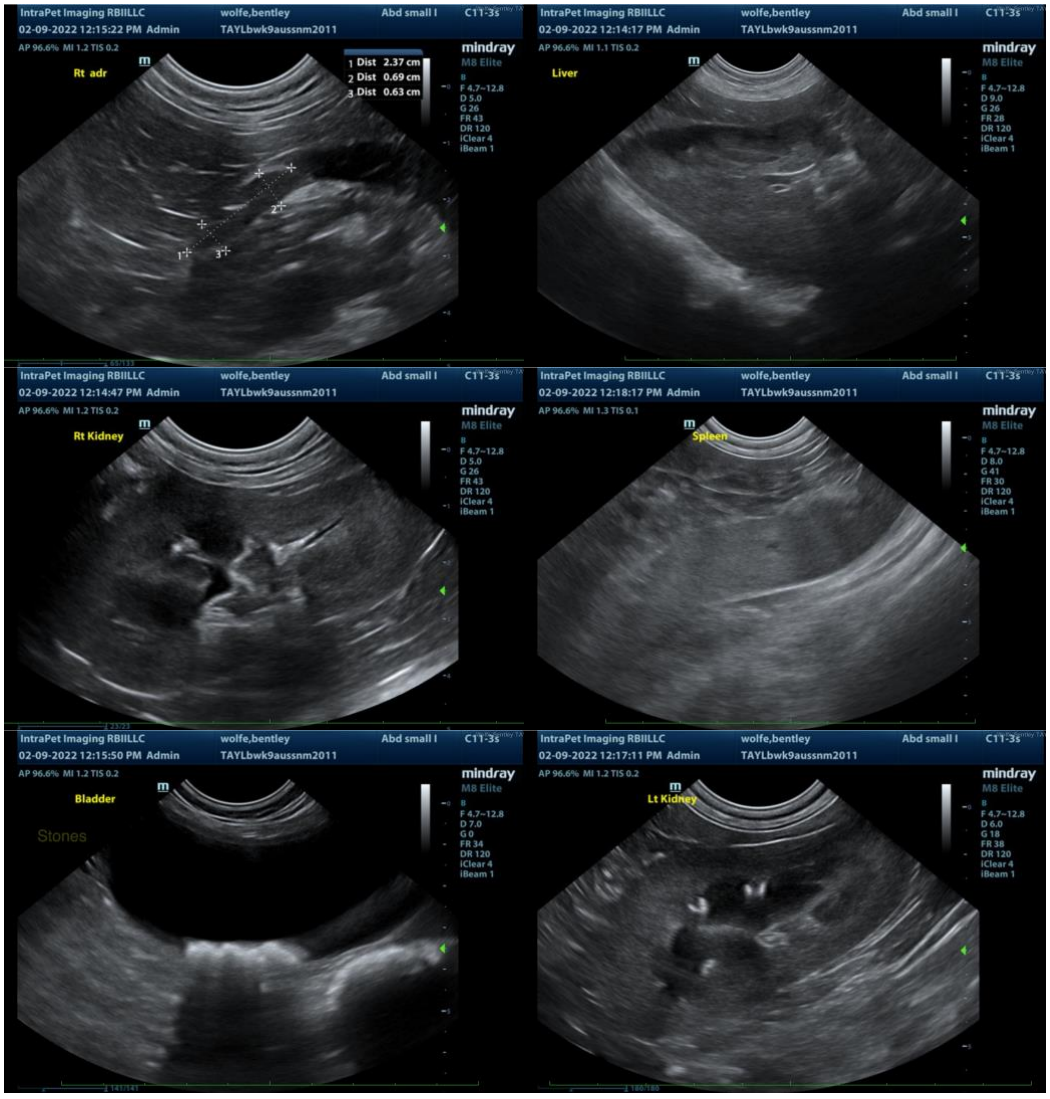
- Age-related pancreatic remodeling +/- fibrosis. Low-grade pancreatitis may be present, particularly if a positive Murphy's sign is present.

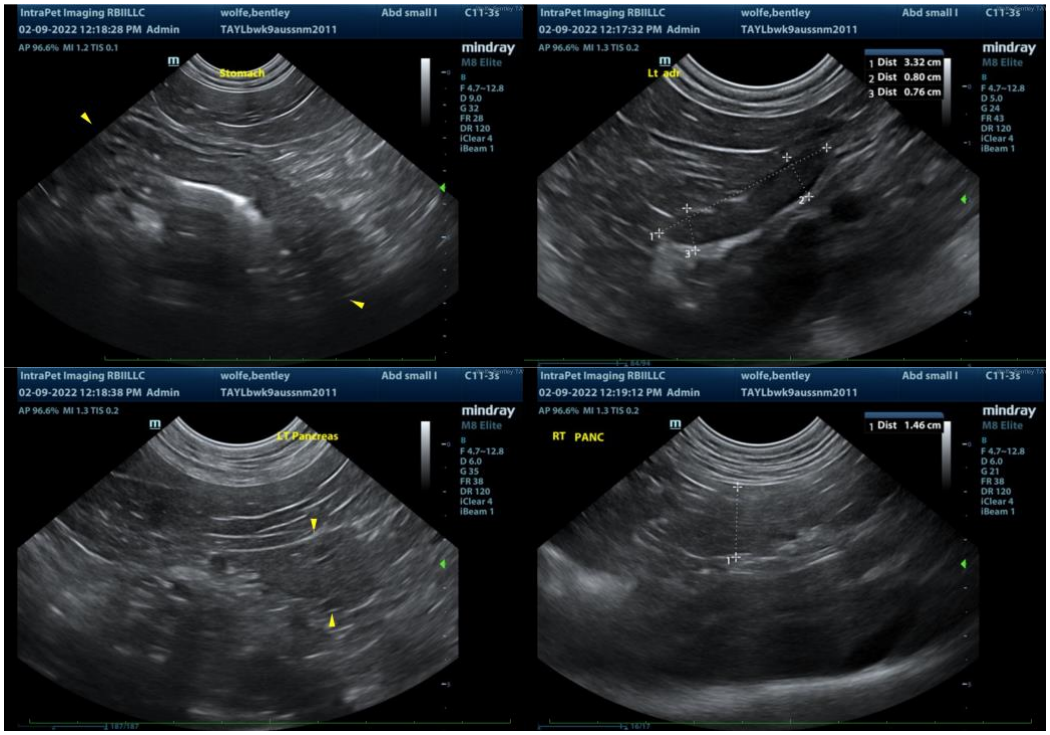
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- To further investigate the hypercalcemia, a PTH/PTHRP/ionized calcium is recommended, along with three-view thoracic radiographs to assess for occult neoplasia in the chest.

- Regarding the cystic calculi, a cystotomy with stone removal, analysis and culture is recommended.

- If a more conservative approach is desired, medical dissolution can be attempted with antibiotics and a prescription urinary diet. However, given the likelihood that calcium oxalate stones are present, medical dissolution is unlikely to be effective.





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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