



PATIENT PRESENTING CLINICAL SIGNS

PATIENT Lexi Snow
SPECIES Canine
BREED Shih Tzu
SEX Female Spayed
AGE 13 years
WEIGHT 6.5 kg

PRESENTING CLINICAL SIGNS
History: Presented at our hospital for AUS. Cushing's dx a year ago, excessive thirst and hunger, on the meds had dh++, dh got better, still excessive drinking, when they took her to the vet her values were normal so thinking not cushingoid. Rec AUS Previous Health Concerns: was prone to UTI, put on c/d Current Medications: antibiotic (sl elevated kidney values) Appetite/When did they eat last: last night/very early am Diet: c/d canned

Abnormal PE/Chem/CBC/UA Results: rDVM bloodwork 7/10/23: LYM 0.71; HCT 56.25; MCHC 29.8; PLT 579; 7/11/23: Cortisol4.1; 7/12/23: Post cortisol 9.2

SEX ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The urinary bladder is moderately distended. The wall is normal in thickness. The mucosal surface in the region of the apex is slightly irregular. A scant amount of gravity-dependent mineralized sand is observed within the lumen. The region of the trigone is normal.

The left kidney is normal in size (3.77 cm in length) with a normal shape and smooth peripheral contours. The cortex is hyperechoic relative to the spleen with excessive foci of mineralization observed throughout the cortex. There is moderate loss of corticomedullary distinction. Hyperechoic shadowing diverticular foci are visualized. Mild pyelectedasia is present (0.21 cm in the transverse plane). There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

The right kidney is normal in size (4.39 cm in length) with a slightly irregular shape. The cortex is hyperechoic relative to the spleen with excessive focus of mineralization. There is poor corticomedullary distinction. Moderate pyelectedasia is present (0.32 cm in the transverse plane). A few, small, nonobstructive nephroliths are visualized. There is no evidence of infarcts or hydroureter. Renal vasculature is normal.

Adrenal Glands

The left adrenal gland is mildly enlarged (0.63 cm at cranial pole) (0.78 cm at caudal pole) (2.08 cm in length) with a normal shape and 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 borderline enlarged (0.72 cm at cranial pole) (0.57 cm at caudal pole) (1.78 cm in length) with a normal shape and 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 (1.08 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. A few pinpoint hyperechoic foci are observed throughout the organ. Splenic vasculature appears normal.

Liver

The liver is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic 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 is distended. The wall is normal in thickness. A few polypoid-like lesions are arising from the luminal surface. A moderate amount of aggregated, echogenic, partially suspended sludge, in a partially stellate pattern is observed within the lumen. The cystic and common bile ducts are normal/not seen.

INTERPRETED BY

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

IMAGING PERFORMED BY

Erin Wicks

HOSPITAL NAME

Shores VEC

REFERRING VET

Dr Miller

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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 is normal in thickness with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

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

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

- The gallbladder changes are most consistent with an emerging mucocele.
- Mild bilateral adrenomegaly

Secondary Findings

- Bilateral chronic renal changes with nonobstructive nephrocalcinosis. The pyelectasia (more pronounced in the right kidney) may be secondary to pyelonephritis, age-related remodeling, PU/PD or some combination thereof.
- Urinary bladder sand
- Subtle dystrophic mineralization of the spleen. This is typically a benign incidental finding often associated with endocrinopathies.
- The pancreatic changes are most consistent with age-related parenchymal remodeling, potentially secondary to a prior inflammatory episode, early fibrosis or chronic pancreatitis.
- Suspected benign diffuse hepatopathy. Vacuolar hepatopathy (i.e., idiopathic/endocrine) is the top differential, with a lower possibility of inflammatory disease, infiltrative neoplasia, or other hepatopathies. Correlation with the patient's liver values is recommended.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the pyelectasia and history of urinary tract infections, a urinalysis with culture and sensitivity is recommended. If there is no evidence of a urinary tract infection, consider additional testing for Cushing's disease (i.e., low-dose dexamethasone suppression test +/- adrenal panel (University of TN)).
- Given the gall bladder changes, Ursodeoxycholic acid (Ursodiol) is recommended. Serial sonographic monitoring (e.g., every 6-8 weeks) of the gall bladder is recommended to assess



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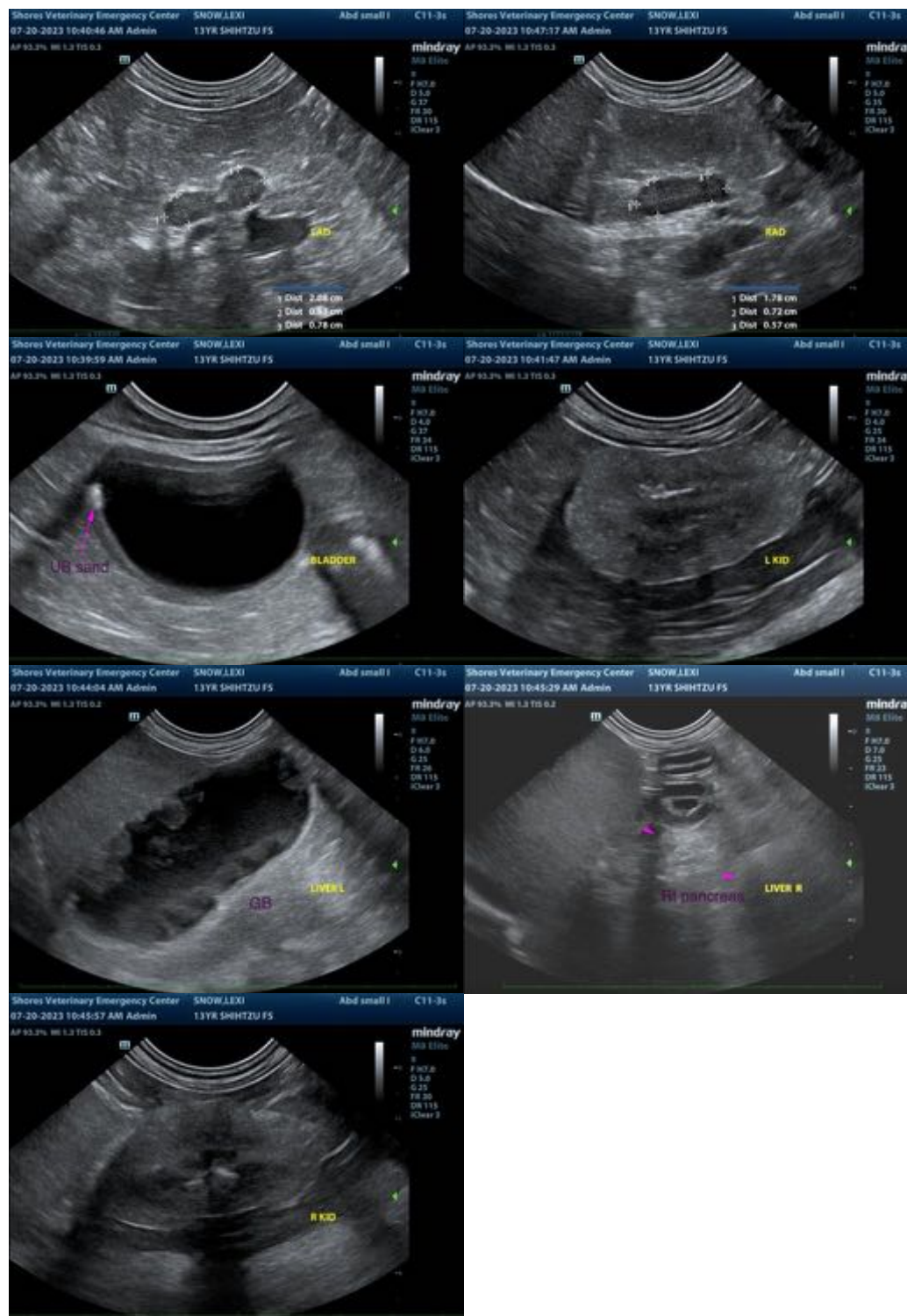
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for progression to a fully formed mucocele. If progression occurs, a cholecystectomy may be warranted.





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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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