



PATIENT PRESENTING CLINICAL SIGNS

PATIENT
Yume Chapell
History: acute onset anorexia, lethargy as well as diarrhea. No hx of vomiting. Prior hx of sterile nodular panniculitis - one new mass noted ventrum but not draining, erythematous or painful. Started on IVF yesterday + buprenorphine and cerenia.

SPECIES

Canine

BREED

Sheltie X

SEX

Spayed Female

Abnormal PE/Chem/CBC/UA Results: Weight loss noted, febrile (104.7). mildly painful cranial abdomen. Lateral/V/D thoracic/abdominal rads: NSF - lungs clear; adequate serosal detail on abdominal rads, otherwise NSF CHEM 15/lytes: Increased TP (8.5); increased GLOB (6.1); increased ALP (586), mild hypoglycemia (66) CBC: Microcytic, hypochromic non - regenerative anemia (HCT = 31%); leukocytosis (21.15); neutrophilia (19.04); thrombocytopenia (129K) CPL: abnormal Saline autoagglutination: Negative AFAST: negative Accuplex4Dx: negative all 4 Sent out blood panel to antech to double check CBC findings: CHEM: (from antech): Decreased ALB (2.5), increased ALP (478), increased GLOB (5.2), hypoglycemia (68), increased TP (7.7) CBC: Leukocytosis (19.0), neutrophilia (17,100); HCT low normal @ 36%; MCV/MCH flagged as WNL. Patient transferred to local ER for continued IVF, BG monitoring and analgesics; fever has resolved today but still no appetite. BG normalized overnight without tx.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

AGE

11 years

Urinary System

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder is moderately distended. A small amount of suspended, echogenic debris is observed within the lumen. No masses, inflammatory changes or calculi are observed. The region of the trigone and the visible portion of the proximal urethra are normal.

WEIGHT

17.1 lbs

The region of the **prostate** is not visualized due to its pelvic location.

The **left kidney** is subjectively normal size (5.18 cm in length); with a normal shape and architecture with smooth peripheral margins. Hyperechoic shadowing diverticular foci are visualized. There is a normal 1:3 cortex to medulla ratio with poor corticomedullary distinction. Trace pyelectasia is present. A few small, nonobstructive nephroliths are visualized. There is no evidence of infarcts or hydronephrosis. Renal vasculature is normal.

INTERPRETED BY

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HOSPITAL NAME

All Creatures
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REFERRING VET

Jessica Bailes

The **right kidney** is subjectively normal size (5.19 cm in length) 'with a normal shape and architecture with smooth peripheral margins. Hyperechoic shadowing diverticular foci are visualized. There is a normal 1:3 cortex to medulla ratio with poor corticomedullary distinction. A few small, nonobstructive nephroliths are visualized. There is no evidence of pyelectasia, infarcts or hydronephrosis. Renal vasculature is normal.

Adrenal Glands

The **left adrenal gland** is enlarged (0.71 cm at cranial pole) (0.98 cm at caudal pole) (2.98 cm in length); with an irregular shape. The parenchyma is heterogenous with loss of glandular detail. There is no obvious evidence of vascular invasion.

The **right adrenal gland** is normal size (0.44 cm at cranial pole) (0.62 cm at caudal pole) (2.36 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** subjectively enlarged with swollen, slightly rounded peripheral contours. The parenchyma is mottled in appearance. At least one, small myelolipoma is visualized. Splenic vasculature appears normal with no evidence of thrombosis.

INVOICE

11616

DATE

9.8.22

Liver

The **liver** is subjectively prominent in size with swollen curvilinear peripheral contours. The parenchyma is isoechoic relative to the spleen and exhibits mild heterogeneity. No distinct focal lesions are observed. Hepatic vasculature 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 suspended, echogenic debris is observed within the lumen. The cystic and common bile ducts are normal/not seen.

Gastrointestinal

The **gastric lumen** is not distended. The gastric wall is 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. There is no evidence of an obstructive pattern.

Pancreas

The left limb is prominent in size with slightly irregular 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

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

ULTRASONOGRAPHIC FINDINGS

Primary Findings

- The pancreatic changes are suggestive of mild, chronic pancreatitis.
- The splenic parenchymal changes are nonspecific and could be secondary to a benign process (i.e., lymphoid hyperplasia, extramedullary hematopoiesis, antigenic stimulation, splenitis) or infiltrative neoplasia (i.e., lymphoma).

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.
- The left adrenal changes could be consistent with benign nodular hyperplasia or an emerging tumor.
- Bilateral degenerative renal changes with nonobstructive nephrocalcinosis.

*An obvious cause for the patient's clinical signs is not definitively identified in this study. Considerations include pancreatitis, sepsis, occult neoplasia, other.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Consider three-view thoracic radiographs to assess for occult disease in the chest.
- Consider a cPLI to further assess for pancreatitis.

- If the patient remains persistently hyperglobulinemic, a serum protein electrophoresis may be indicated.
- Also consider a urinalysis and urine culture and sensitivity to assess for occult urinary tract infection.
- Regarding the splenic changes, consider a fine-needle aspirate if clotting status is appropriate.
- Regarding the left adrenal changes, consider a repeat ultrasound in 4-6 weeks to assess for progression.





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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