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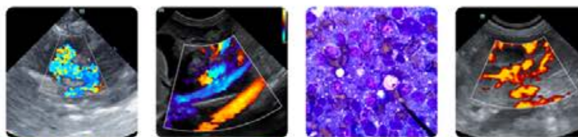


Clinical Sonography & Telecytology
Educational Teleconsultation Services™

PATIENT
Casey Ross

SPECIES
Canine

BREED
Shih Tzu

SEX
Neutered Male

AGE
9 Years 3 Months

WEIGHT
5.2 kg

INTERPRETED BY
Dr Brittany Sinclair, BVSc(hons), DACVECC

IMAGING PERFORMED BY
Dr. Brian Barnes

HOSPITAL NAME
Westview Veterinary Hospital

REFERRING VET
Dr. Brian Barnes

INVOICE
71614

DATE
11/5/25

PRESENTING CLINICAL SIGNS

Casey has started urinating in the house, usually triggered by a sudden/loud noise (doorbell, TV etc) and anxiety has been high, "scared of everything". " 1) Increased Pancreatic enzymes 2) Urinating in the house 3) inappropriate USG 4) Anxieties

Abnormal PE/Chem/CBC/UA Results: CBC: RBC 9.37 (N 5.65-8.87) HGB 20.6 (N 13.1-20.5) Retic 119 (N 10-110) Chem: ALT 151 (n 10-125) AMYL >2500 (n 500-1500) Lipa 5369 (N 200-1800) PL 1667 (N 0-200) T4: 42 (N 13-51) SDMA: 11 (N 0-14) USG: 1.024

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

Urinary bladder lumen volume is small, and walls are diffusely thickened most consistent with pseudohypertrophy. The ureters were not visible which is normal. There was normal wall layering with no masses, uroliths or abnormal focal thickening visualized. Urine was anechoic. No evidence of inflammatory or neoplastic changes were noted.

The right kidney has a smooth capsule and with mild hazing of corticomedullary definition. No evidence of pelvic dilation was present. Hyperechoic, shadowing foci present in renal parenchyma and calyces consistent with nephrocalcinosis. Right kidney measures 3.68 cm.

The left kidney has a smooth capsule and with mild hazing of corticomedullary definition. No evidence of pelvic dilation was present. A non-obstructive nephrolith is visualized measuring 0.28 cm. Left kidney measures 3.68 cm.

Adrenal Glands

Both adrenal glands were visualized and recognized as having normal shape, size, position and echogenicity for this breed and age. The visible phrenic vasculature was unremarkable. Left measures 0.91 cm in length x 0.60 cm at the caudal pole and 0.44 cm at the cranial pole. Right measures 2.15 cm in length x 0.61 cm at the caudal pole and 0.56 cm at the cranial pole.

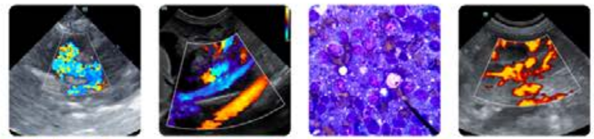
Spleen

The spleen is of normal size with a smooth capsule. There are multifocal, somewhat poorly defined, hypoechoic nodules noted throughout.

Liver

The liver is subjectively normal in size with normal contours and structure. There is age appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed.

Gall bladder is moderately distended with normal wall thickness and anechoic contents. Common bile duct is non-distended and tapers normally.



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Gastrointestinal

The stomach contains minimal luminal contents. It measures at a normal thickness of with some variability due to the presence of rugal folds. The distinction of the gastric wall layers is adequate. No masses or focal lesions were observed.

The visualized areas of duodenum, jejunum and ileum have a relatively uniform diameter with minimal fluid distension. Wall thickness is normal. Bowel loops follow a curvilinear path with distinct wall layering maintaining the typical 1:3 muscularis:mucosa layer ratio. There were no focal lesions consistent with obstruction or a mass effect observed.

The ileocecal junction was not visualized. Sections of colon are visualized with formed fecal material and gas shadowing distally. There is no observed focal or generalized colon wall thickening or loss of layering.

Pancreas

The visible pancreas was observed to be largely isoechoic to surrounding omental fat.

Lymph Nodes

No clinically significant lymphadenopathy or abnormalities noted.

Free Abdomen

No masses or free fluid were noted.

ULTRASONOGRAPHIC FINDINGS

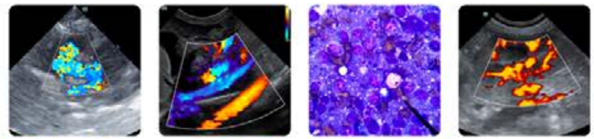
- Multifocal splenic nodules.
- Degenerative renal changes with nephrocalcinosis.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Splenic nodules are small and do not have any overt ultrasonographic features concerning for a mass, though this cannot be definitively ruled out with ultrasonographic appearance. They may represent benign hematomas, hemangiomas, regenerative or reactive nodules. FNA is recommended to further define. Repeat ultrasound evaluation (every 2-3 months) for progression or resolution is recommended pending aspirate results.

The visible pancreas appears ultrasonographically normal. While pancreatic enzymes including PLI are elevated, pancreatitis may be subclinical. It is not a likely explanation for inappropriate urination.

Urinary bladder wall thickening is likely pseudohypertrophy secondary to low volume of urine and lack of luminal distention. No specific cause of lower urinary signs is apparent in this study. No urinary bladder stones or signs of inflammation or debris were present. Urine culture with cystocentesis sample (if not already done) with sensitivity is recommended to rule out occult urinary tract infection, even if not apparent on urinalysis. Thorough physical exam and historical information gathering to search for presence of predisposing factors for ascending infection such as skin disease, vulva conformation, or husbandry, which may be predisposing to vulva vaginitis and ascending infections is important. Ultimately, cystoscopy may be required for more definitive diagnosis. It is possible that inappropriate urination is behavior related. Given renal changes and only minimally concentrated USG, early renal disease is possible, which may lead to mild polyuria and inability to hold bladder when startled.



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Urinary bladder

Splenic nodules

Left kidney

Liver

Normal SI

Right kidney

Left limb pancreas

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.

Dr Brittany Sinclair, BVSc(hons), DACVECC info@SonoPath.com