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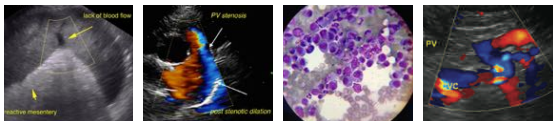

ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

PATIENT
Olivia Bertsch

SPECIES
Canine

BREED
Miniature Schnauzer

SEX
Spayed Female

AGE
13 years

WEIGHT
17.1 lbs

INTERPRETED BY
Eric Lindquist, DMV, DABVP, Cert. IVUSS

IMAGING PERFORMED BY
Jenna Walsh, CVT

HOSPITAL NAME
Pleasant Hill AH

REFERRING VET
Dr. Larsen

DATE
12/20/21

Invoice
94725

PRESENTING CLINICAL SIGNS

HL: 12-15-21 at 3:03p: CTO - report u/a is abnormal O says pet is drinking a lot of water - O reported that the - Pet is incontinent when sleeping at night (O puts a diaper on her); will go out more frequently in the daytime, yet periodically is incontinent. Ddx: primary incontinence and secondary uti, or primary pu/pd and secondary incontinence, open Need to check for a radioLUCent urolith or other abn of the bladder or kidneys; possible just a vaginal infection secondary to incontinence/moisture * TP for u/s (and possible culture)
Abnormal PE/Chem/CBC/UA Results: HL: 12-15-21 at 2:01p: Blood work is good. Urinalysis shows persistence of urine infection/inflammation in a dilute/isosthenuric urine (USG 1014) ** Need to check for uroliths - radiograph or u/s -- OR -- resistant bacteria (culture) (or both) Current meds zylkene 75 mg sm k9/fel & Royal Canine S/O urinary tract food

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder** revealed apical wall thickening with a minor amount of suspended debris. There was no evidence of calculi or masses at the time of the sonogram.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for this age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. Mineralization was noted in the kidneys and non-obstructive. The largest calculus measured 0.2 cm. The left kidney measured 4.3 cm. The right kidney measured 4.93 cm.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The right adrenal gland measured 2.32 x 1.39 cm at the cranial pole and 0.44 cm at the caudal pole. The left adrenal gland measured 1.77 x 0.43 cm at the caudal pole and 0.31 cm at the cranial pole.

Spleen

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes was noted.

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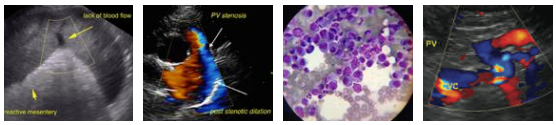

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Liver

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

ULTRASONOGRAPHIC FINDINGS

Renal calculi.

Minor bladder thickening.

Structurally normal adrenal glands.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Early PDH can technically be present with normal adrenal glands; however, this is fairly rare. The patient may be passing calculi periodically. However, there was no obstructive disease and they appear localized in the kidneys. Partial water deprivation could be considered to assess the ability to concentrate.

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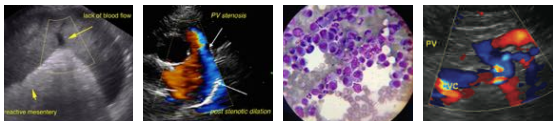

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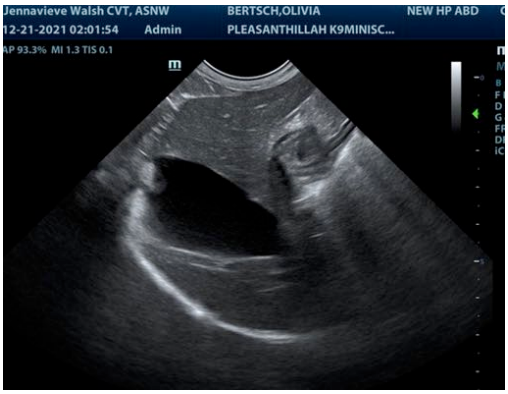

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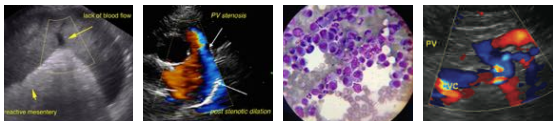

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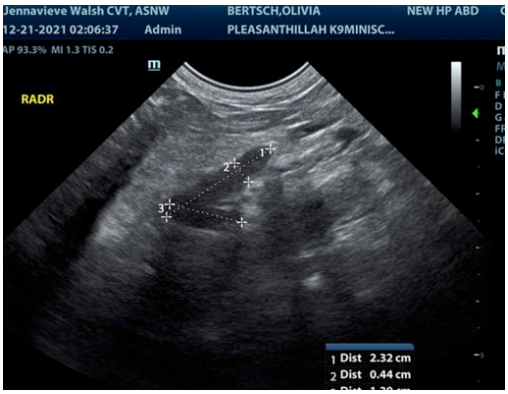

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS

CEO of Sonopath.com

Eric.Lindquist@SonoPath.com