



PATIENT PRESENTING CLINICAL SIGNS

Charlie Hansen History: hematuria , hx of bladder stones

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Canine

Urinary System

BREED

Chihuahua Mix

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. A small calculus was noted and measured 0.5 cm with separate debris. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

SEX

Neutered male

The **left kidney** 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 his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present.

AGE

10 years

The **right kidney** revealed multi-focal, nodular cortical changes with areas of mineralization. The right kidney measured 4.92 cm. Significant areas of dystrophic mineralization were noted throughout the right kidney with nodular changes and disrupted architecture. I cannot rule out a neoplastic process of the right kidney.

WEIGHT

12 lbs

Adrenal Glands

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

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 left adrenal gland measured 1.84 x 0.6 cm at the caudal pole and 0.59 cm at the cranial pole. The right adrenal gland measured 2.43 x 0.84 cm at the cranial pole and 1.14 cm at the caudal pole.

IMAGING PERFORMED BY

Jenn

Spleen

HOSPITAL NAME

Rockaway AH

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.

REFERRING VET

Dr. Maniar

Liver

INVOICE

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Exam of the cranial abdomen demonstrated excessive **liver** size and swollen contour. Mild, coarse architecture was noted with increased portal markings and minor parenchymal remodeling is suggestive of an inflammatory component. Minor excessive GB debris was noted with the presence gall bladder dilation and precipitate without the overt formation of mucocele but this may be an issue in the future.

DATE

4/27/23

This type of liver presentation typically is associated with slow and gradual SAP elevations with low-grade ALT rise. USG-FNA sampling is encouraged if more aggressive LE profiles are present such as ALT



PATIENT

Charlie Hansen

> 200 or rapid rise in SAP. These presentations are usually reactive hepatopathies owing to other disease processes either endocrine (Diabetes, Hypothyroidism, Cushing's disease), "antigen surveillance" from the gut/pancreas, or idiopathic breed predisposed progressions.

SPECIES

Canine

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.

BREED

Chihuahua Mix

SEX

Neutered male

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

AGE

10 years

ULTRASONOGRAPHIC FINDINGS

WEIGHT

12 lbs

Significant dystrophic mineralization and irregular, nodular right kidney.

Age related left renal changes.

Small bladder calculus.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The changes in the right kidney may be degenerative and secondary to dystrophic mineralization and passage of calculi; however, I cannot rule out the potential of renal carcinoma of the right kidney given the fairly innocuous appearance of the left kidney. Ultrasound-guided FNA of the right renal cortex can be considered; However, given that cystotomy would be in order in this patient direct inspection +/- right nephrectomy can be considered depending on surgical findings. Recheck sonogram is recommended in a week to assess if any progressive changes occur that would suggest a neoplastic process. Full urinary work-up is warranted.

IMAGING PERFORMED BY

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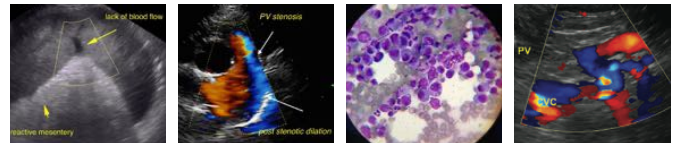
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SPECIES

Canine

BREED

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SEX

Neutered male

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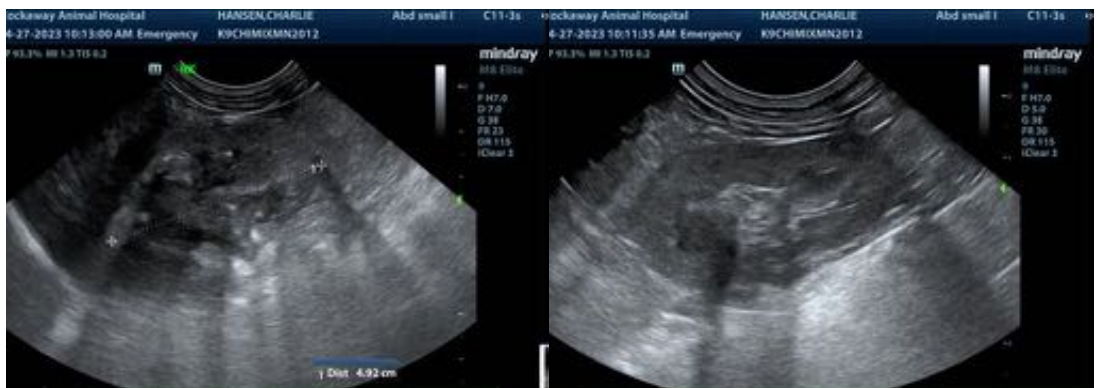
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com