

## PATIENT

Schmoie Robeson

## SPECIES

Canine

## BREED

Pomeranian

## SEX

Neutered male

## AGE

18 years

## WEIGHT

9.2 lbs

## INTERPRETED BY

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

## IMAGING PERFORMED BY

Nikki Kollman RVT

## HOSPITAL NAME

Airpark AH

## REFERRING VET

Dr. Owens

## INVOICE

69240

## DATE

12/12/25

## PRESENTING CLINICAL SIGNS

History: Physical exam performed yesterday for changes in behavior, hiding, seeming uncomfortable and worsening cognitive dysfunction over the last week. Also urinating more frequently. History of severe osteoarthritis in multiple joints, on rimadyl, librela, apoquel long term. History of pancreatitis, on ID low fat long term.

CBC/Chem 17/Lytes WNL 12/11/25 UA via cystocentesis- RBC, unclassified crystals. Rads show multiple calcifications in the region of kidneys and ureters and some more caudally on the right side visible on VD view.

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

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. Medullary structure differed distinctly from that of the cortex. Corticomedullary calculi were noted with pyelectasia. Echogenic cortical remodeling was noted in the right kidney measuring 3.53 cm. The left kidney measured 3.5 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 1.1 x 0.54 cm at the cranial pole and 0.38 cm at the caudal pole. The left adrenal gland was visualized obliquely and measured 0.6 cm.

### 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.

### Liver

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some age-related parenchymal remodeling was noted but likely not



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clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.

## *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

Moderate degenerative renal changes with nephrolithiasis and non-obstructive

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

I am most concerned about the long term viability of the kidneys in this patient. The patient may be passing calculi periodically, yet no obstructive disease was noted at the time of the sonogram. Blood pressure measurements are indicated. Urine culture and sensitivity are recommended if any inflammatory sediment is present in the urine. Given the cognitive dysfunction skull CT and cervical CT may be appropriate.



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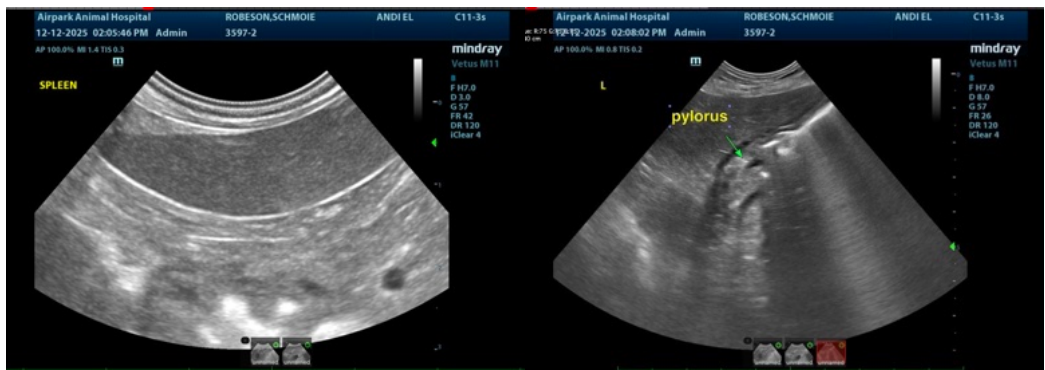
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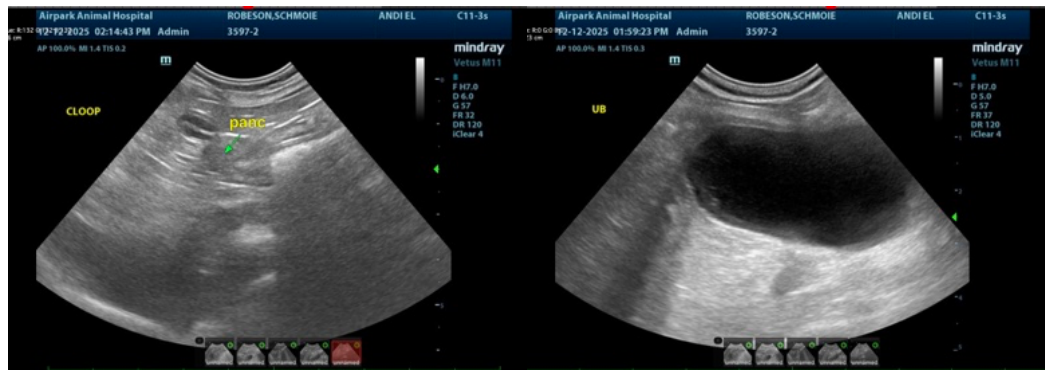
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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 (CFM), Cert. IVUSS, CEO of SonoPath.com

[info@SonoPath.com](mailto:info@SonoPath.com)