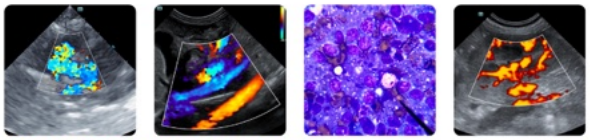


PATIENT

Amber Armstrong

SPECIES

Canine

BREED

Dachshund

SEX

Spayed female

AGE

15 years

WEIGHT

10.9 lbs

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Wasserman

HOSPITAL NAME

Village Pet Clinic

REFERRING VET

Dr. Defabio

INVOICE

74878

DATE

4/27/26

PRESENTING CLINICAL SIGNS

History: Sedated with 0.05ml Dexdomitor 0.5mg/ml IV. Adequate for sonogram. This is an abdomen study with additional small parts/thyroid study. Concerning pTH and iCa. Results most consistent with a parathyroid related disease. Primary differential is primary hyperparathyroidism. However, renal secondary hyperparathyroidism cannot be r/o.
Ultrasound of neck and abdomen performed today. Purpose of sonogram: Assess abdomen for causes of increased calcium/renal causes sonographically, thyroid sonogram submitted as separate study for this case.
Abnormal PE/Chem/CBC/UA Results: Total Calcium: 13.4 Creatinine 1.5, BUN 25 Specific gravity 1.020 Ica: 1.56 from Michigan State. See attached.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The pelvic urethra was imaged 4.0 cm beyond the cystourethral junction and appeared normal. 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.

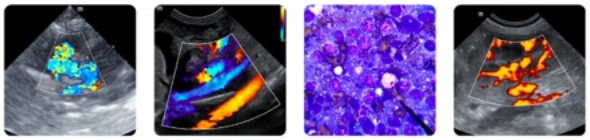
The **kidneys** revealed normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The right kidney measured 4.64 cm with non-obstructive, corticomedullary mineralization. The left kidney measured 4.52 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 0.73 cm at the caudal pole and 0.85 cm at the cranial pole. The left adrenal gland measured 0.68 cm at the caudal pole and 0.55 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. The spleen measured 1.06 cm.



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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 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 EXAMINATION OF THE THYOID

The right thyroid and parathyroids were normal. The largest parathyroid measured 0.2 cm. The thyroid measured approximately 2.0 x 0.5 cm.

Regional tissues were noted in the left and right cervical region such as esophagus, trachea, carotid and salivary glands were all normal.

The left thyroid lobe revealed a hypoechoic, cranial 0.5 x 0.3 cm, hypoechoic nodule that is consistent with parathyroid adenoma. The remainder of the parathyroid is unremarkable.

ULTRASONOGRAPHIC FINDINGS

Unremarkable abdomen with minor renal mineralization.

Age related pancreatic changes.

Left cranial parathyroid adenoma.

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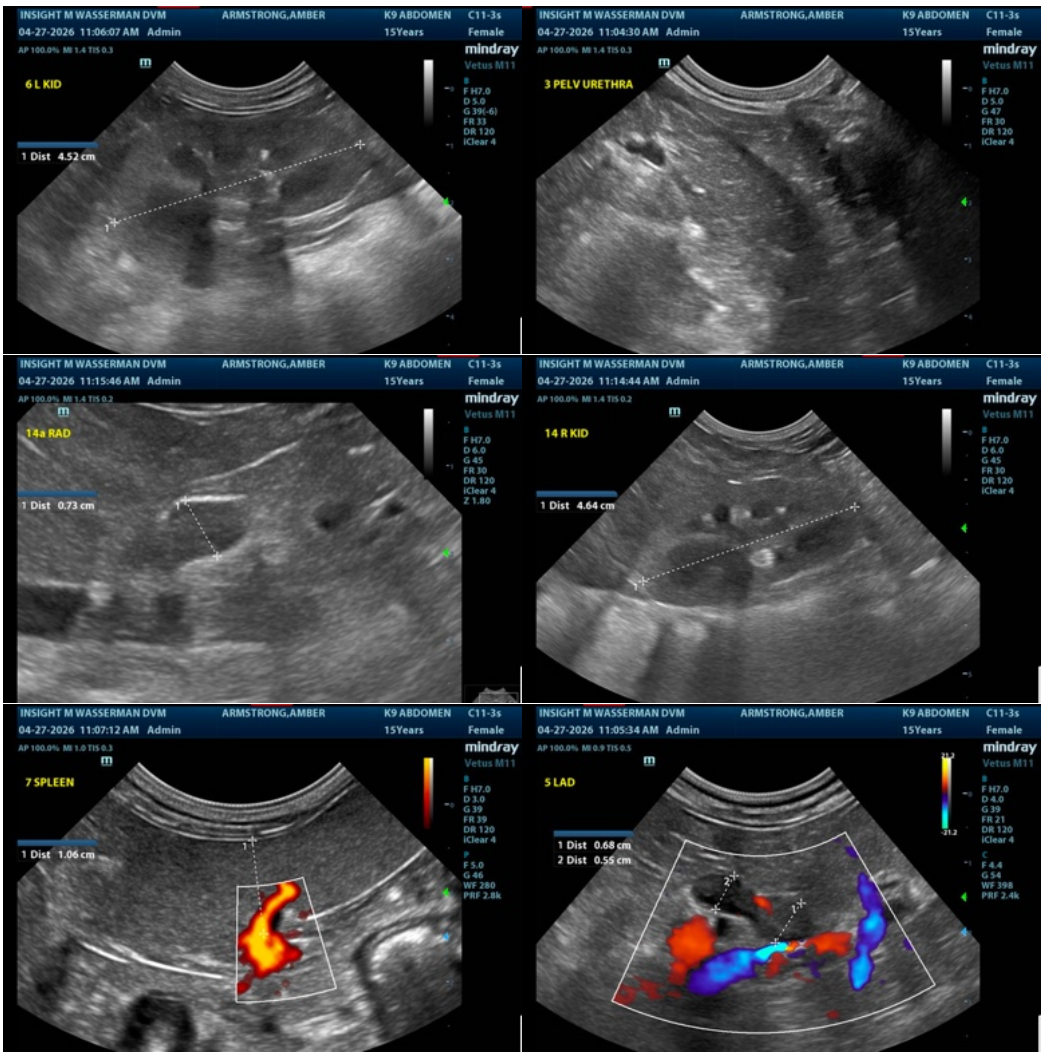
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There was no evidence of abdominal pathology directly related to the hypercalcemia; however, pinpoint mineralization on the kidneys may be secondary to that state.

Surgical intervention of the left cranial parathyroid adenoma is recommended given the patient's history.



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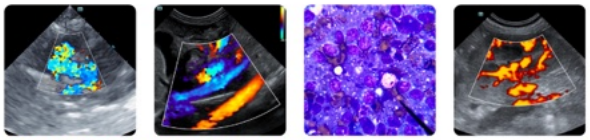

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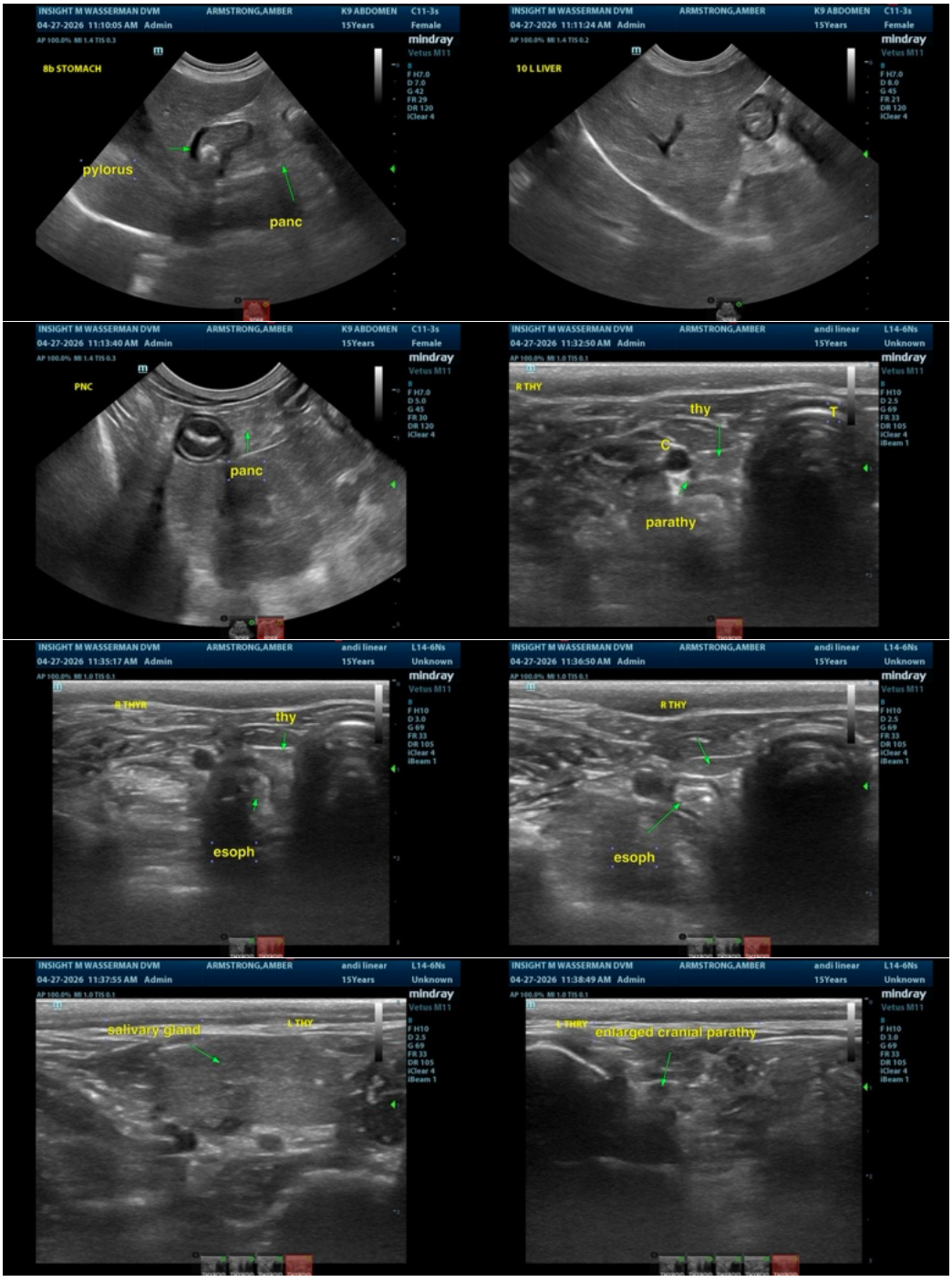

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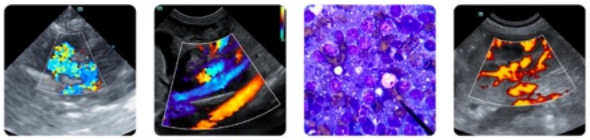

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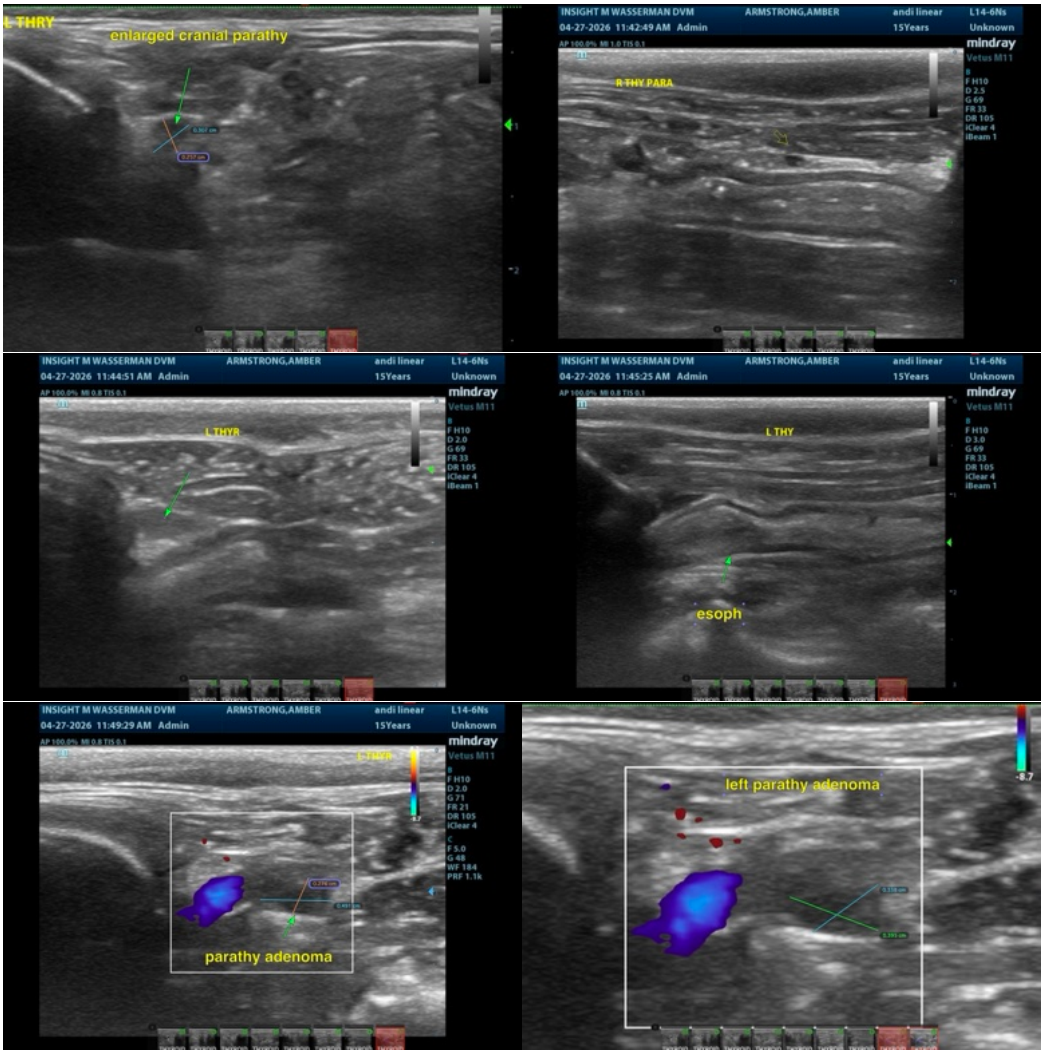

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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