



PATIENT

Buddy Tran

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered Male

AGE

13 Years

WEIGHT

7 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Callihan

HOSPITAL NAME

Animal Emergency
Care

REFERRING VET

Dr. Drummond

INVOICE

14789

DATE

4/16/22

PRESENTING CLINICAL SIGNS

History: Buddy is a 14-year-old male neutered Chihuahua mix that presented to on ER 4/15/22 due to inability to stand, left side seemed to be most affected. Owner saw him in a puddle of his own urine. He was normal by the time he presented on ER. The owner reports that he started to become pu/pd the day that they increased his Trilostane. No vomiting or diarrhea. He is very calm/inactive to begin with. Buddy was diagnosed with Cushing's disease in February, he was placed on Trilostane at that time. Last month they tested to see if his Cushing's was controlled and given that test, his Trilostane was increased about 2 weeks ago. Late castration 2021 due to testicular masses Leydig tumor on BOTH and Sertoli on one

Abnormal PE/Chem/CBC/UA Results: BP normal; pendulous abdomen; no heart murmur, eupneic CBC - mild leukocytosis, neutrophilia Chem - Severe hyperglycemia, severely elevated ALP and ALT, hyperlipemia UA - USG 1.030, glucose 1,000, Ketones 150; no bacteria Has been hospitalized overnight with GI support, IVF, short acting IM insulin doses with good response; is eating today

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 were noted. Ureteral papillae were normal.

The **prostate** was slightly heterogeneous and mildly irregular, measuring 1.2 cm. A focal area of mineralization was present, appears to be urethral, however, early prostatic carcinoma cannot be completely ruled out.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some minor 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. Minor mineralization was present. Occasional cortical cysts were noted. The right kidney measured 5.0 cm. The left kidney measured 5.0 cm.

Adrenal Glands

The **adrenal glands** appeared slightly enlarged and swollen. No evidence of focal capsular expansion or invasion into the phrenic veins were noted. No overt suspicion of neoplasia was noted. This is considered likely a hyperplastic change associated with stress or adrenal endocrinopathy (PDH). If isosthenuria is persistently present and the patient morphologically suggests Cushing's disease, then ACTH testing would be indicated. The right adrenal gland was slightly irregular, measuring 1.2 cm at the cranial pole and 0.6 cm at the caudal pole. The left adrenal gland measured 0.88 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



PATIENT

Buddy Tran

congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

Liver

SPECIES

Canine

The **liver** was diffusely hyperechoic to falciform fat. The gallbladder and common bile duct were unremarkable. Occasional parenchymal cysts were noted, minor.

BREED

Chihuahua

Gastrointestinal

SEX

Neutered Male

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

AGE

13 Years

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some mild 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 subxyphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

WEIGHT

7 kg

ULTRASONOGRAPHIC FINDINGS

- Geriatric abdomen
- Diabetic hepatopathy
- Mild bilateral adrenal hypertrophy, consistent with PDH/Cushings. No evidence of adrenal neoplasia.
- Mild to moderate degenerative renal changes with slight cortical cysts
- Slight prostatic mineralization

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

IMAGING PERFORMED BY

Dr. Callihan

If Cushingoid parameters are present, then work up for Cushings is indicated. I recommend recheck imaging of the prostate in approximately 1 month, especially if any clinical signs progress.

HOSPITAL NAME

Animal Emergency
Care

Potential Causes of Diabetic Dysregulation

This is a suggestive checkoff list when faced with an unregulated diabetic patient:

REFERRING VET

Dr. Drummond

UTI

Dietary indiscretion/intolerance

Pancreatitis

INVOICE

14789

Hyperthyroidism/hypothyroidism

Exogenous steroids (including topical eye meds)

DATE

4/16/22

Cushing's

Acromegaly



PATIENT

Owner compliance

Buddy Tran

Insulin quality issues

Antibodies to insulin

SPECIES

Underlying Neoplasia

Canine

BREED

Chihuahua

SEX

Neutered Male

AGE

13 Years

WEIGHT

7 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Callihan

HOSPITAL NAME

Animal Emergency
Care

REFERRING VET

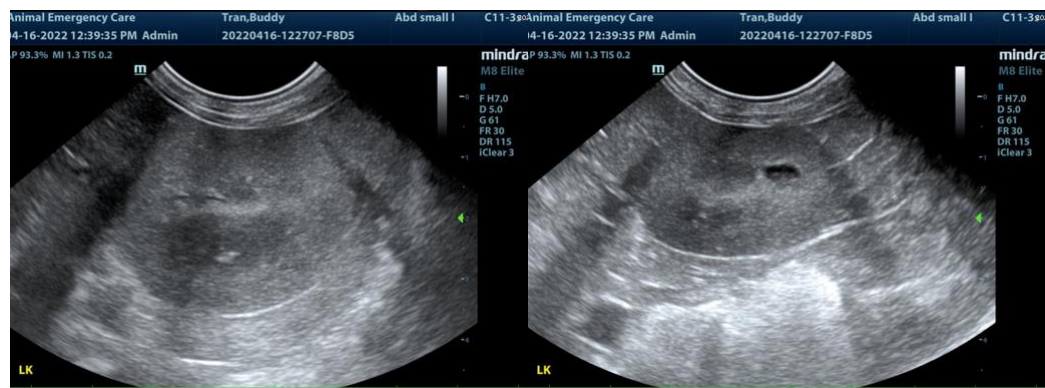
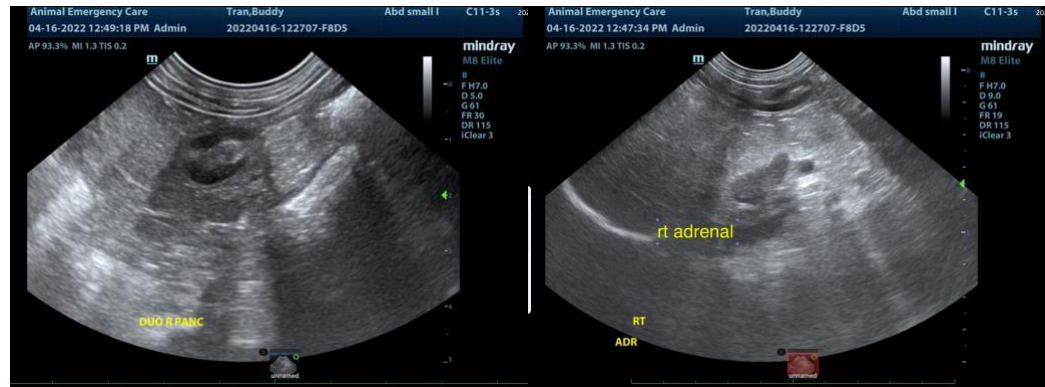
Dr. Drummond

INVOICE

14789

DATE

4/16/22





PATIENT

Buddy Tran

SPECIES

Canine

BREED

Chihuahua

SEX

Neutered Male

AGE

13 Years

WEIGHT

7 kg

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Callihan

HOSPITAL NAME

Animal Emergency
Care

REFERRING VET

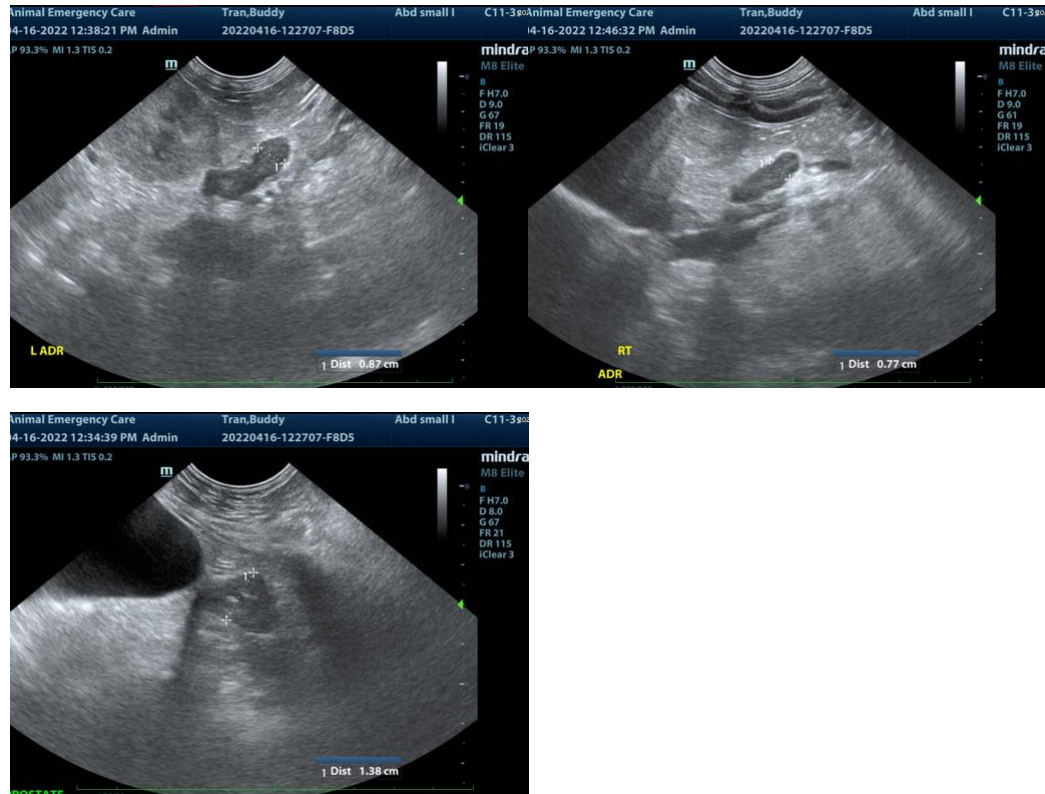
Dr. Drummond

INVOICE

14789

DATE

4/16/22



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
info@SonoPath.com