



**PATIENT**

Bella Cordeiro

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Spayed Female

**AGE**

8 Years

**WEIGHT**

5.2 kg

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Singh

**HOSPITAL NAME**

Balmy Beach PH

**REFERRING VET**

Dr. Singh

**INVOICE**

12519

**DATE**

11/13/21

**PRESENTING CLINICAL SIGNS**

History: reduced appetite, vomiting Was diagnosed with Stage 2 IRIS renal disease Today's bloodwork shows stage 4, not sure about the cause of the acute on chronic exacerbation

Abnormal PE/Chem/CBC/UA Results: Marked azotemia - elevated BUN (41), creat (601), Phos (3.20), SDMA 72 Elevated liver enzymes - ALT 850, ALP > 2000 Mild nonregenerative anemia

**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 **kidneys** revealed diffuse hyperechoic cortical changes consistent with interstitial nephrosis and hyperechoic medullary rim sign. Both kidneys measured approximately 3.0 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 left adrenal gland measured 0.5 cm. The right adrenal gland measured 0.5 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 were 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 clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The **gallbladder** revealed excessive dependent debris (not consistent with mucocele formation) and mild overdistention.

**Gastrointestinal**

The **stomach** was thickened with hypertrophied mucosa. The small intestine and colon were unremarkable.

**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.



**PATIENT**

Bella Cordeiro

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Spayed Female

**AGE**

8 Years

**WEIGHT**

5.2 kg

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Singh

**HOSPITAL NAME**

Balmy Beach PH

**REFERRING VET**

Dr. Singh

**INVOICE**

12519

**DATE**

11/13/21

**ULTRASONOGRAPHIC FINDINGS**

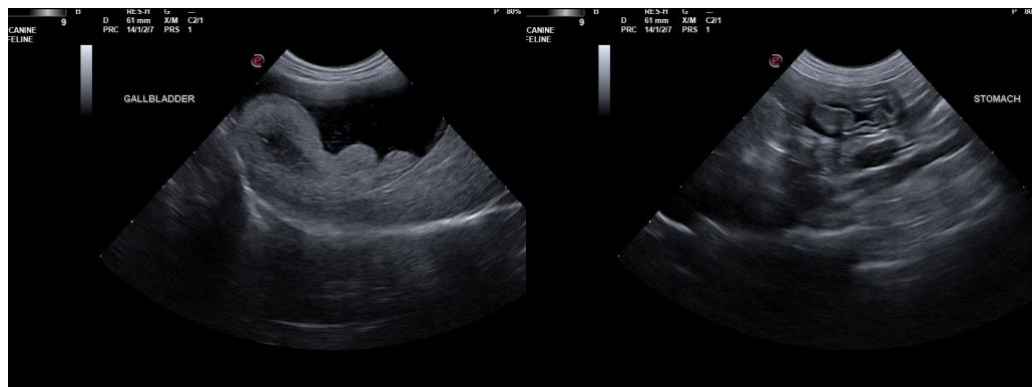
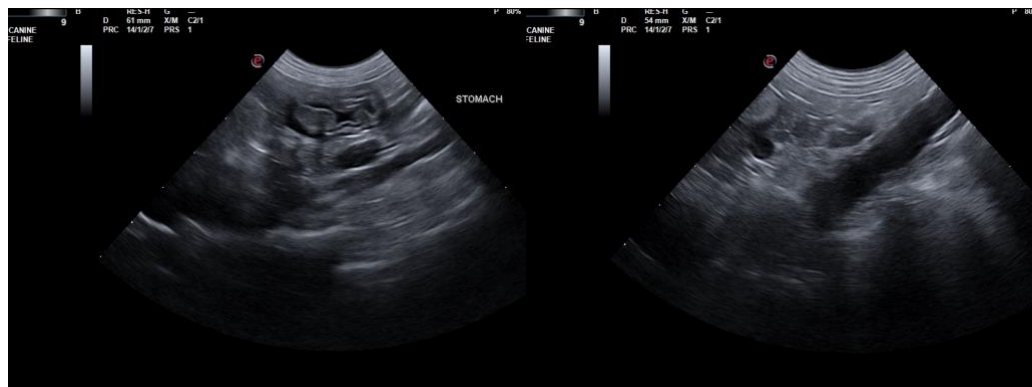
- Chronic end-stage interstitial nephrosis pattern
- Age-related hepatic changes with emerging gall bladder mucocele
- Stomach thickened with hypertrophied mucosa

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Possible toxin or infectious exposure playing a role. Renal biopsy would be necessary for further definition. 72-hour IV fluid protocol, GI protectants and ursodiol therapy all indicated. Prognosis long-term is poor.

For an additional charge, internal medicine consult can be utilized through SonoPath.com. You can select the internal medicine drop down at <http://spa.sonopath.com/>.

One of the world's top internists & SonoPath associate Dr. Remo Lobetti BVSc, MMedVet, PhD, DECVIM can evaluate your case through SonoPath. <https://sonopath.com/resources/sonopath-services/internal-medicine-teleconsultation-services>





**PATIENT**

Bella Cordeiro

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Spayed Female

**AGE**

8 Years

**WEIGHT**

5.2 kg

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING  
PERFORMED BY**

Dr. Singh

**HOSPITAL NAME**

Balmy Beach PH

**REFERRING VET**

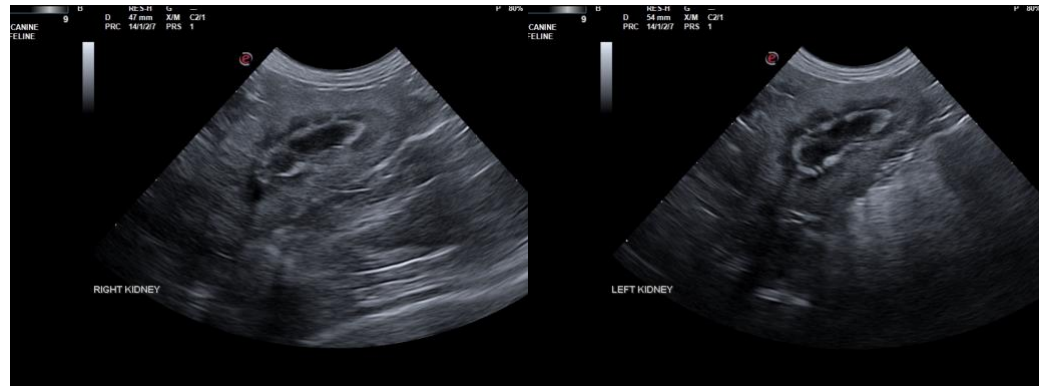
Dr. Singh

**INVOICE**

12519

**DATE**

11/13/21



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