

**DATE PRESENTING CLINICAL SIGNS**

8/23/21

**PATIENT**

Lincoln Adams

**SPECIES**

Canine

**BREED**

Pitbull Terrier

**SEX**

Neutered Male

**AGE**

11/20/2015

**WEIGHT**

55 Pounds

History: Seen 8/21 for Vomiting and anorexia. Hind limb paralysis since Jan 2020. Went home on meds below and we sent out labs. Over the weekend no appetite, O able to syringe administer some water, as well as nutritional that was watered down. P is QAR, with dry mm's, no overt abdominal pain and normothermic. Current Medications: starting 8/21: Cerenia 1 mg/kg Prilosec 1 mg/kg sid, Cefpodoxime 8 mg/kg sid. Lab Results: Elevated WBC, abnormal electrolytes (low K and Cl), marked bacteriuria with pyuria. Radiographs: Radiographs 8/21 showed fluid in stomach and SI, gas seen in bladder, images taken prior to any urine sampling. Date of Previous IntraPet Ultrasound: No previous IntraPet scans. Sedation: Torbugesic IV. Stat Report: Requested and approved.

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN****Urinary System**

A trace amount of sand was noted in the **urinary bladder** with suspended debris. The sand was minimal, extending approximately 1.0 cm.

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. The capsules were acceptably uniform without significant irregularities. The right kidney measured 6.59 cm. The left kidney measured 7.08 cm. Trace pyelectasia was noted in both kidneys.

**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 2.21 cm x 0.59 cm at the cranial pole and 0.47 cm at the caudal pole. The left adrenal gland measured 3.23 cm x 0.68 cm at the caudal pole and 0.6 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 were noted.

**Liver**

The **liver** images submitted revealed subjectively normal liver size, contour, and structure. Parenchymal echogenicity was naturally coarse and hypoechoic to the spleen. Vascular and biliary tracts were of normal volume with no evidence of congestion. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.

**INTERPRETED BY**Eric Lindquist, DMV  
DABVP, Cert. IVUSS**HOSPITAL NAME**

Perry Hall AH

**REFERRING VET**

Dr. Hatzigiannakis

**INVOICE**

12690

### ***Gastrointestinal***

The **stomach** was overdistended with chyme. Regional intestinal inflammation as present. Dilated small intestine followed by empty small intestine was present, consistent with obstructive pattern. The mid right abdomen revealed a shadowing (4.0 cm) structure with peripheral inflammation appears to be jejunum. Portions of small intestinal thickening noted prior to the obstruction indicative of likely chronic disease with secondary obstruction.

### ***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.

### ***Free Abdomen***

The mesenteric **lymph nodes** presented normal length to width ratio with slight, swollen contour. There was no loss of parenchymal detail. This is most consistent with reactive lymphadenitis or lymphatic hyperplasia. Trace free fluid was noted adjacent to the urinary bladder likely deriving from the intestinal inflammation.

## **ULTRASONOGRAPHIC FINDINGS**

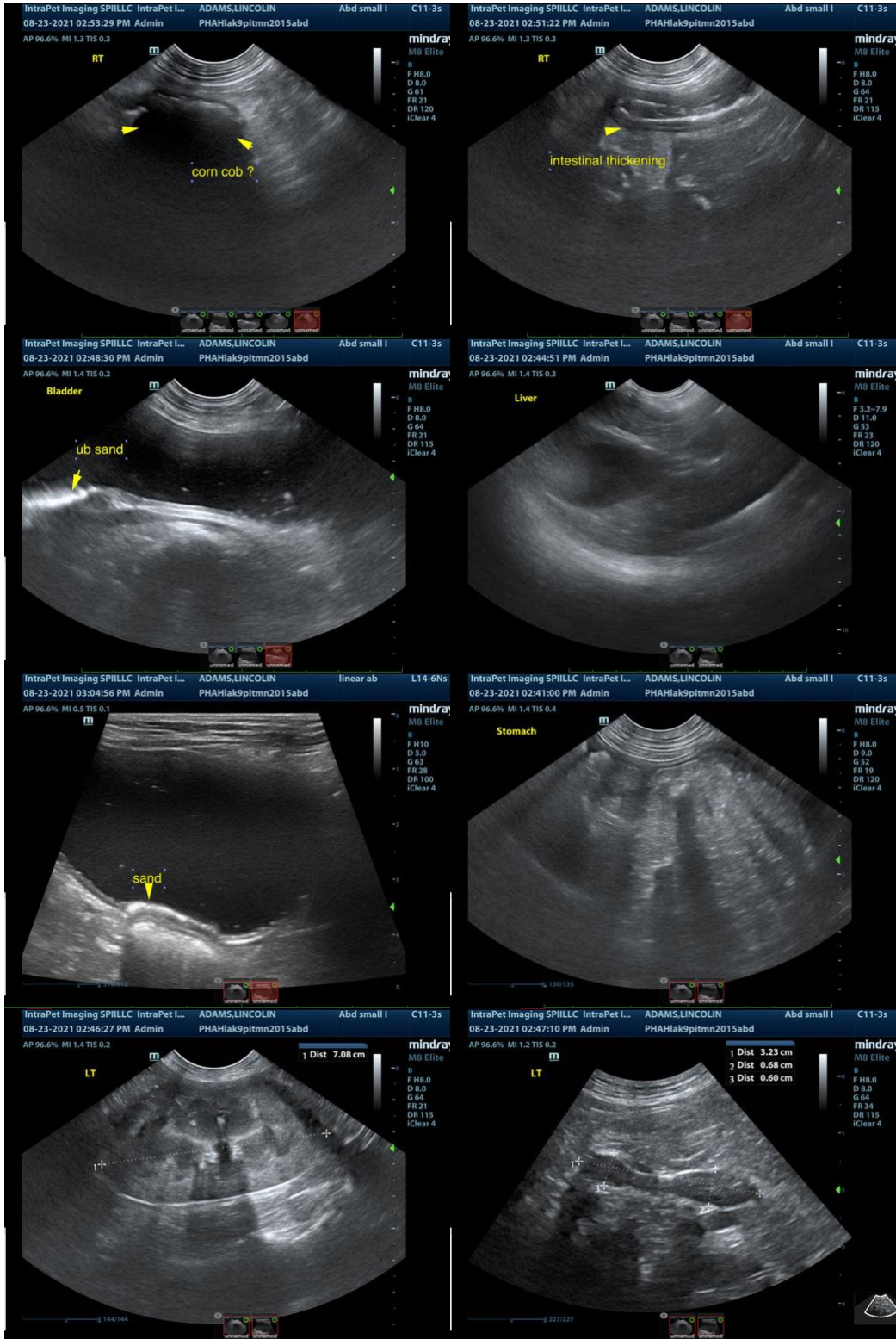
- Small intestinal foreign body
- Concurrent bladder sand
- Trace pyelectasia noted in both kidneys, possible low grade pyelonephritis
- Regional intestinal inflammation

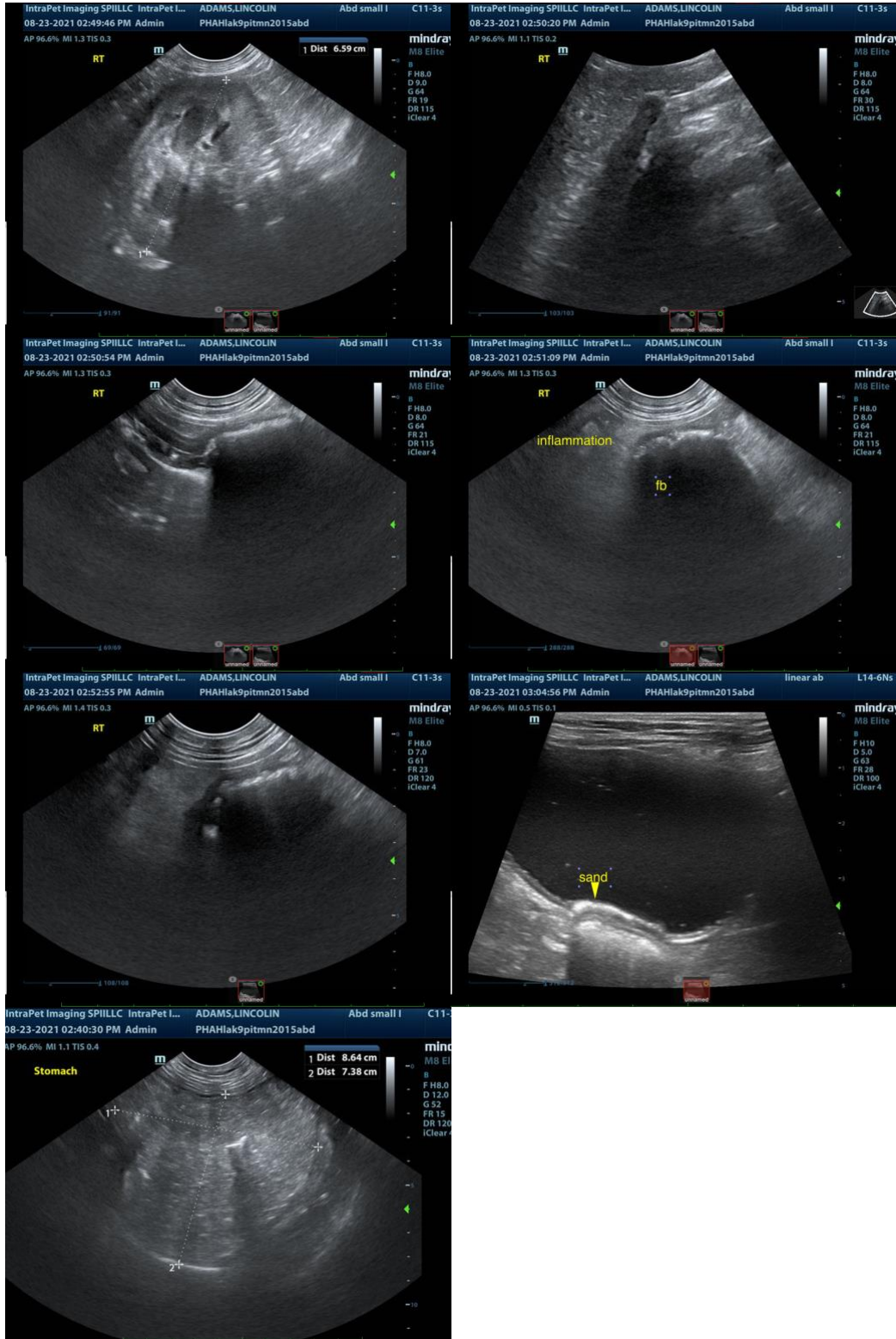
## **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Immediate exploratory surgery warranted. Treatment for chronic UTI indicated. The sand should resolve medically in this patient, however, bladder lavage could be considered. 4-week antibiotic therapy warranted based on culture results. Intestinal biopsies warranted at the site of obstruction to rule out underlying disease. Minor potential for underlying intestinal neoplasia such as lymphoma. Acute on chronic inflammatory bowel with concurrent foreign body likely. The foreign body structure was approximately 3.0 cm and would be consistent with corn cob or material of similar echotexture.

GI Foreign Body Research

According to Sonopath research presented at ECVIM 2016 (Stockholm, Sweden), Advances in Small Animal Medicine and Surgery (May 2017), and EVDI 2017 (Verona, Italy), concurrent underlying chronic inflammatory neoplastic intestinal disease can often reside in PICA patients. Therefore, surgical biopsies are essential in this case regardless of the exploratory findings.





**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.

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