



## PATIENT PRESENTING CLINICAL SIGNS

**Jeger Kapalac** History: Presenting for vomiting and not eating. For the past day, the patient has not been interested in food and vomiting/regurgitating water and bile. No diarrhea noted. Nothing he could have gotten into, no historical health concerns. Cryptorchid confirmed with AUS.

## SPECIES

Canine

## BREED

Chihuahua

## SEX

Intact Male

## AGE

13 years

## WEIGHT

3 kg

Abnormal PE/Chem/CBC/UA Results: Radiology report: Conclusion- Empty stomach and small bowel consistent with fasting or anorexia since recent vomiting. Otherwise, no definitive radiographic abnormalities are identified. Gastritis is suspected as the cause of recent vomiting. Pancreatitis or vomiting secondary to nongastrointestinal diseases such as acute renal or hepatic disease cannot be ruled out. Equivocal evidence for skin nodule at the ventral cranial surface of the prepuce or protrusion of the tip of the penis at the preputial orifice is of uncertain/questionable clinical significance. Physical examination should be utilized to determine if there is any significant pathology involving the region.

Recommendations: The clinical situation should determine the need for additional diagnostics. Review of routine CBC, chemistry profile and urinalysis results could be valuable to rule out occult renal or hepatic disease, causing secondary vomiting. If indicated by the clinical situation, such as if lab test results are unremarkable and vomiting continues despite medical management for gastritis, repeating abdominal radiographs or performing an abdominal ultrasound exam would be recommended to further evaluate the abdominal structures to further assess for a cause of vomiting.

Read By: Justin M. Goggin, DVM, DACVR (Diagnostic Radiology)

CPL: normal. EPOC: Na+ 139, k+ 3.0, ca++ 0.95, BUN 45, HCT 62%  
 CBC: Leukocytosis, Neutrophilia, Lymphopenia. CHEM: BUN 56.2, phos 8.4, calcium 8.2, TP 8.4, globulin 5.3, ALT (with 10x dilution) 3799, ALP (with 10x dilution) 3103, GGT 161, TBILLI 5.0  
 PCV/TS: 52%/8.6 g/dl - icteric

## INTERPRETED BY

Andrea Nicastro,  
 DVM, Diplomate  
 ACVIM (Small Animal  
 Internal Medicine)

## IMAGING PERFORMED BY

Dr. Van Nieuwal

## HOSPITAL NAME

Animal Emergency  
 Hospital Volusia

## REFERRING VET

Dr. Van Nieuwal

## INVOICE

11353

## DATE

8.8.22

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### Urinary System

The **urinary bladder** wall is normal in thickness and the mucosal surface is smooth. The bladder lumen is moderately distended with anechoic urine. No masses, inflammatory changes or calculi are observed. Ureteral papillae and visualized portion of the proximal urethra, visible to a depth of 1 cm, are normal.

The **prostate** is enlarged (3.56 cm in width) with a slightly irregular shape. The parenchyma is heterogenous with a few ill-defined cystic areas. The prostatic urethra is not overtly dilated.

The **left kidney** is subjectively normal in size, with a normal shape and architecture and smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

The **right kidney** is normal size (3.83 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal to mild loss of corticomedullary distinction. There is no evidence of pyelectasia, nephroliths, infarcts or hydroureter.

### Adrenal Glands

The **left adrenal gland** is normal size (0.40 cm at cranial pole) (0.52 cm at caudal pole); normal shape; homogenous parenchyma. The glandular echogenicity and detail are unremarkable. Capsule, cortex, and medullary definition are normal. The phrenicoabdominal vein and surrounding vasculature are normal.

The caudal pole of the **right adrenal gland** is visualized and is normal in size (0.41 cm in width); with a normal shape, glandular echogenicity and detail. Surrounding vasculature appears normal.

### **Spleen**

The **spleen** is normal in size (0.92 cm in width at the level of the hilus) with a normal capsular contour. The parenchyma is subtly mottled in appearance. No focal lesions are observed. Splenic vasculature is normal.

### **Liver**

The **liver** is subjectively enlarged with slightly swollen peripheral contours. The parenchyma is isoechoic relative to the spleen and diffusely homogeneous in appearance. No distinct focal lesions are observed. Vascular and biliary tracts are of normal volume with no evidence of congestion.

The **gall bladder** is moderately distended. The wall is thickened (up to 0.33 cm) and irregular. A moderate amount of aggregated, echogenic, suspended sludge, in a stellate pattern is observed within the lumen. The mesentery surrounding the gall bladder is hyperechoic. Trace free fluid is suspected adjacent to the gall bladder wall.

### **Gastrointestinal**

The **gastric lumen** is mildly to moderately fluid-distended. The gastric wall is normal in thickness with a normal layering pattern. The pyloric outflow tract appears to be patent. The small intestinal lumen is segmentally fluid-distended (mild). The small intestinal wall thickness is normal with a normal layering pattern and appropriate mural detail. Discreet masses are not identified. The colonic wall is normal. There is no evidence of an obstructive pattern.

### **Pancreas**

The region of the **pancreas** is isoechoic relative to surrounding omental fat. No obvious parenchymal abnormalities are observed. There is no evidence of regional inflammation or effusion.

### **Free Abdomen**

The **mesentery** in the cranial abdomen is hyperechoic. The abdominal **lymph nodes** are normal/not visible.

## **ULTRASONOGRAPHIC FINDINGS**

### **Primary Findings**

- Suspected gall bladder mucocele. with adjacent peritonitis, which may be secondary to cholecystitis, rupture or impending rupture.
- Nonspecific diffuse hepatopathy. Differentials include inflammatory disease (i.e., bacterial cholangiohepatitis, chronic active hepatitis), hepatotoxicosis, Leptospirosis, other hepatopathy, +/- concurrent age-related change (i.e., regenerative nodular hyperplasia).

### **Secondary Findings**

- The splenic parenchymal changes are most consistent with a benign process such as lymphoid hyperplasia, extramedullary hematopoiesis, splenitis or antigenic stimulation with a low possibility of infiltrative neoplasia (i.e., lymphoma, mast cell neoplasia).
- Bilateral, minor, chronic, age-related renal changes
- Suspected mild gastric ileus



