



**PATIENT**

**PRESENTING CLINICAL SIGNS**

Susi Mena Olmeda

History: Presented for an abdominal ultrasound for evaluation of increased liver enzymes. The liver enzymes has been slowly increasing in the past year. Initially in Feb of 2021 they were minimally increase, but the last blood test evaluations have shown that the ALT continues to increase even after Denamarin administration.

**SPECIES**

Canine

Abnormal PE/Chem/CBC/UA Results: PE: Non provided BW: CBC: Thrombocytosis. ( Sept 2022) Platelets 509 (148 - 484) ( April 2021) 790 , (Feb 2021 )721 Chem: ( Sept 2022 ) ALT 673 (10 - 125 U/L) (April 2021 ) 565 (Feb 2021) 134 (Sept 2022) GGT 29 (0 - 11 U/L) (Sept 2022) Amylase 1,734 (500 - 1,500 U/L)

**BREED**

Chihuahua

**ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

**SEX**

*Urinary System*

Female, spayed

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. The region of the trigone is normal.

**AGE**

11 Yrs.

The left kidney is normal size (2.78 cm in length); normal shape and architecture with smooth peripheral margins. There is a normal 1:3 cortex to medulla ratio with minimal loss of corticomedullary distinction. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter.

**WEIGHT**

3 lbs.

The right kidney is normal size (2.64 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. Trace pyelectasia is present. There is no evidence of nephroliths, infarcts or hydroureter.

**INTERPRETED BY**

*Adrenal Glands*

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

The left adrenal gland is normal size (0.41 cm at cranial pole) (0.43 cm at caudal pole) (1.15 cm in length); 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.

**IMAGING PERFORMED BY**

Dr. Gabriel Ferrer

The right adrenal gland is normal size (0.37 cm at cranial pole) (0.36 cm at caudal pole) (1.09 cm in length); 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.

**HOSPITAL NAME**

*Spleen*

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The spleen is normal in size (0.59 cm in width at the level of the hilus) with a normal capsular contour. There is appropriate echogenicity and echotexture. No focal lesions are observed. Splenic vasculature is normal.

**REFERRING VET**

Dr. Rafael Lopez

*Liver*

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The liver is subjectively normal in size with normal contours and structure. There is appropriate echogenicity and echotexture. No overt structural evidence of inflammatory, infiltrative or regenerative pathology is evident. Vascular and biliary tracts are of normal volume with no evidence of congestion. No pathological hepatic lymphadenopathy observed. The gall bladder lumen is moderately distended. The wall is normal in thickness. A large amount of aggregated, echogenic, suspended sludge is occupying the entire lumen. The cystic and common bile ducts are normal/not seen.

**DATE**

10/4/22



## PATIENT

## *Gastrointestinal*

Susi Mena Olmeda

The stomach and intestine are free of stasis and exhibit normal peristaltic activity. The gastric lumen is not distended. The gastric wall and pylorus are normal in thickness with a normal layering pattern. The pyloric outflow tract is patent. The small intestinal lumen is not dilated. 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. No obstructive disease is noted.

## SPECIES

Canine

## *Pancreas*

## BREED

Chihuahua

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.

## SEX

Female, spayed

## *Free Abdomen*

The peritoneal cavity is normal. There is no evidence of inflammation or effusion. The abdominal lymph nodes are normal/not visible.

## AGE

11 Yrs.

## ULTRASONOGRAPHIC FINDINGS

## WEIGHT

3 lbs.

### Primary Findings:

- The gallbladder sludge could be consistent with an emerging mucocele, cholestasis or less likely, fasting.

### Secondary Findings:

- Minor bilateral age-related renal changes with trace pyelectasia.

## INTERPRETED BY

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

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

- Given the gall bladder changes, Ursodeoxycholic acid (Ursodiol) at 10-15 mg/kg once a day is recommended. Serial sonographic monitoring (e.g., every 6-8 weeks) of the gall bladder is recommended to assess for progression to a fully-formed mucocele.
- Serial monitoring (i.e., every 3-4 months) of the patient's liver values is also recommended to assess for progression.

## IMAGING PERFORMED BY

Dr. Gabriel Ferrer

## HOSPITAL NAME

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## REFERRING VET

Dr. Rafael Lopez

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**PATIENT**

Susi Mena Olmeda

**SPECIES**

Canine

**BREED**

Chihuahua

**SEX**

Female, spayed

**AGE**

11 Yrs.

**WEIGHT**

3 lbs.

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PERFORMED BY**

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**HOSPITAL NAME**

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Services

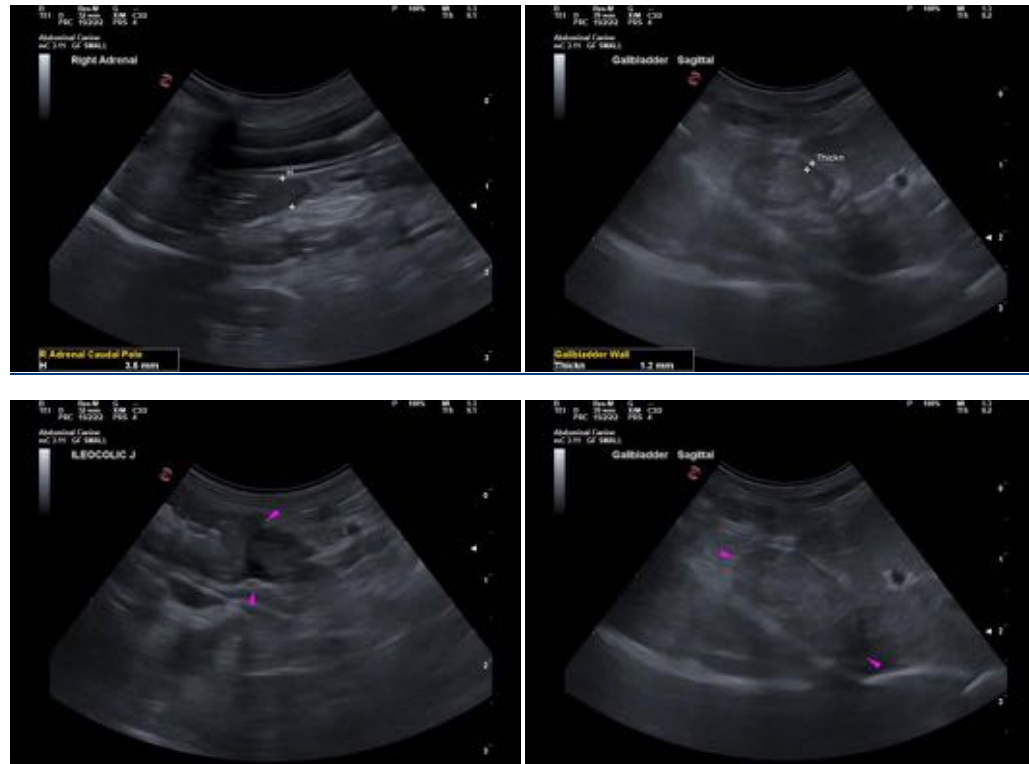
**REFERRING VET**

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**DATE**  
10/4/22



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.

Andrea Nicastro, MPH, DVM, Diplomate DACVIM (Small Animal Internal Medicine)  
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