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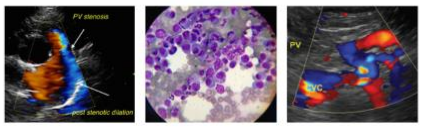
SVS IMAGING



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com

**PATIENT**

Mira Erban

**SPECIES**

Canine

**BREED**

Standard Poodle

**SEX**

Spayed Female

**AGE**

12 Years

**WEIGHT**

56 Lbs.

**INTERPRETED BY**

Beth Johnson, DVM DACVIM

**IMAGING PERFORMED BY**

Sarah Pender, CVT

**HOSPITAL NAME**

SVS Imaging QC

**REFERRING VET**

Dr. Barbara Shields

**INVOICE**

13978

**DATE**

2/17/22

## PRESENTING CLINICAL SIGNS

History: Presented for annual bloodwork

Abnormal PE/Chem/CBC/UA Results: Increased ALT

## ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

### *Urinary System*

The urinary bladder is moderately distended with anechoic contents. No masses, inflammatory changes, echogenic sediment or cystoliths are observed. The urinary bladder, trigone and visible pelvic urethra are normal in thickness with a smooth mucosal surface.

The right kidney is normal in size (6.92 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed.

The left kidney is normal in size (6.47 cm), shape and echogenicity. It has smooth peripheral margination. There is a normal 1:3 cortex to medulla ratio with appropriate corticomedullary distinction. There is no evidence of pyelectasia, mineral or infarcts observed. A small cortical cyst was noted in the left kidney.

### *Adrenal Glands*

The right adrenal gland is normal in size (2.75 cm long x 1.25 cm cranial, 0.4 cm caudal), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

The left adrenal gland is normal in size (2.63 cm long x 0.56 cm cranial, 0.71 cm caudal), shape and contour. Corticomedullary structure is unremarkable. Visible surrounding vasculature appears normal.

### *Spleen*

The spleen is subjectively normal in size with a normal smooth capsular contour. Parenchyma is appropriately finely textured and homogenous with normal echogenicity relative to surrounding tissue (hyperechoic to liver). Splenic vasculature appears normal. Multifocal well-demarcated hyperechoic homogenous nodules were present. A 1.3 cm x 0.8 cm anechoic cystic lesion was noted in the mid spleen, non- capsule disrupting.

### *Liver*

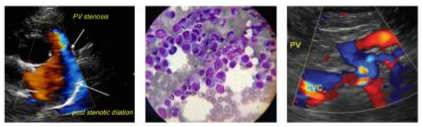
The liver is subjectively normal in size with normal smooth curvilinear peripheral contour. Parenchyma is appropriately hypoechoic to the spleen in echogenicity and appropriately mildly coarse and homogenous in echotexture. No focal lesions are observed. Visible vasculature and biliary tree appear normal without distension or congestion.

The gallbladder is non-distended in size. The wall is smooth without visible thickening. Luminal contents are primarily anechoic. There is no evidence of cystic or common bile duct dilation.

### *Gastrointestinal*

The stomach wall is normal in thickness (canine < 0.5 cm and feline < 0.4 cm) and layering. The lumen of the stomach is empty with no evidence of obstruction, foreign material or infiltrative disease. Pyloric outflow tract appears patent. No appreciable lymphadenopathy in these images.

The visible small intestines are normal in wall thickness and layering (canine duodenum < 0.5 cm and feline duodenum < 0.4 cm; other < 0.3 cm). Small intestinal motility appears adequate (1-3





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contractions per min). The lumen of the small intestine is empty with no evidence of obstruction, foreign material or infiltrative disease.

The visible colon is normal in wall thickness (< 0.2 cm) and layering. Contents are consistent with normal formed feces and gas.

### *Pancreas*

The pancreatic parenchyma is appropriately isoechoic to surrounding tissue. Visible capsule is smooth and normal in contour. There is no visible pancreatic duct dilation. There is no evidence of active peripancreatic inflammation.

### *Free Abdomen*

There is no evidence of peritoneal effusion. There is no apparent lymphadenopathy.

## ULTRASONOGRAPHIC FINDINGS

- The hyperechoic splenic nodules are most consistent with benign myelolipomas. Other differentials such as fibrosis or calcification caused by old hematomas or infarcts, chronic inflammation, granulomatous disease or metastatic disease cannot be ruled out, but are less likely.
- An anechoic non-capsule disrupting spenic nodule was also noted, most consistent with benign cyst or hematoma or extramedullary hematopoiesis. Infiltrative neoplasia cannot be ruled out, but is considered much less likely.
- Incidental left renal cortical cyst.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

ALT is more liver specific than other enzymes. It is a good indicator of active liver damage (cell membrane disruption, cellular necrosis) if the value is increased by at least 3-4 times normal. Differentials include infectious disease, including Leptospirosis, inflammatory disease (ie. active hepatitis, copper, other), toxic insult as well as infiltrative neoplasia.

ALT levels vary in cases of vascular anomalies such as microvascular dysplasia and portosystemic shunts (PSS), but are often less significantly increased.

Non primary hepatic causes of increased ALT can include a variety of other metabolic conditions including, but not limited to, pancreatitis, gastroenteritis, parasitic disease, dental disease, vacuolar or endocrine hepatopathy from diabetes mellitus or hyperadrenocorticism (steroid-induced), hypoadrenocorticism, certain drugs (e.g. phenobarbital, corticosteroids, azathioprine, etc.), and muscle ALT (more likely if AST and CK concurrently increased).

Specific recommendations include a fine needle aspirate of the liver, if patients coagulation status is appropriate and testing for leptospirosis.

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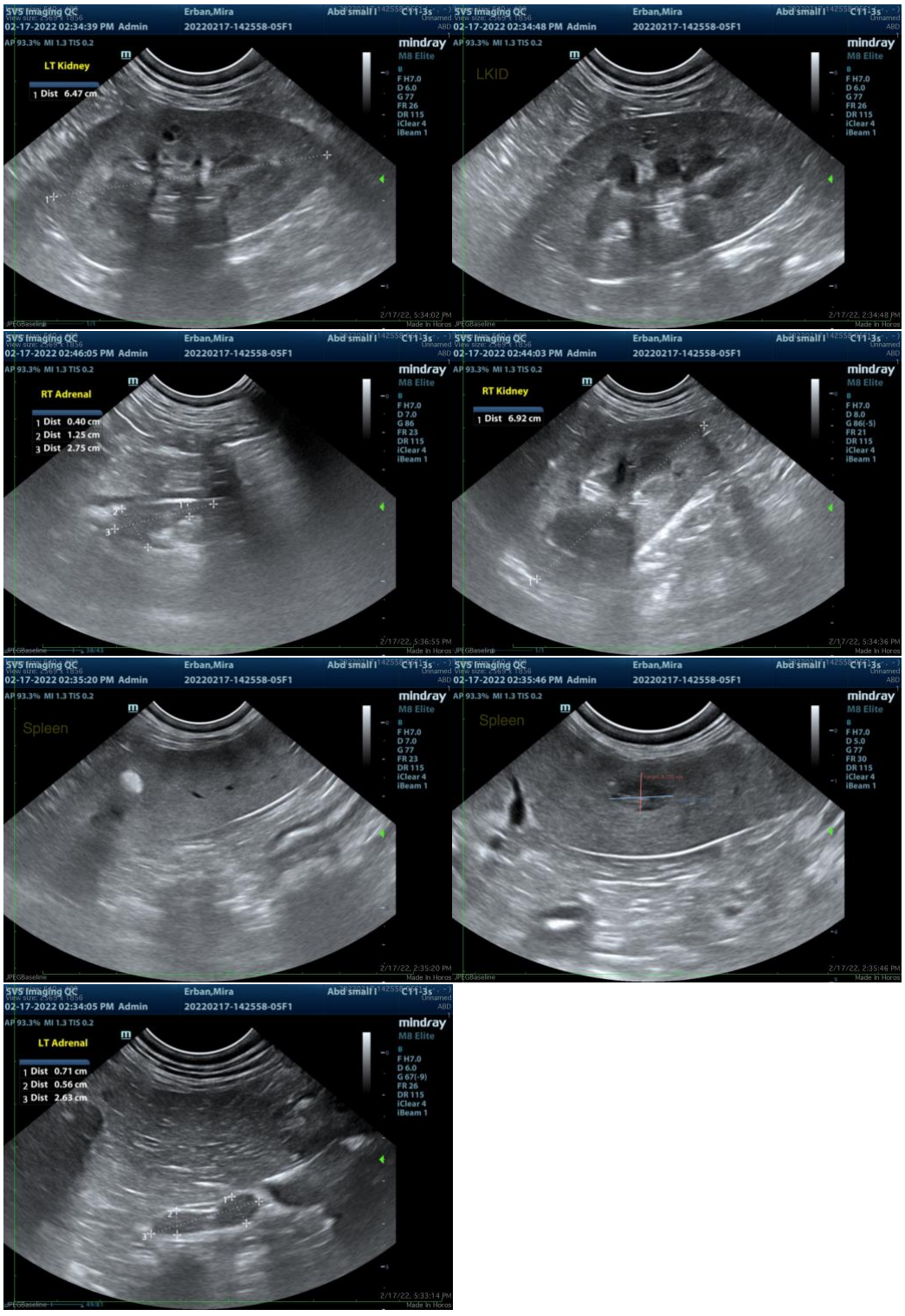
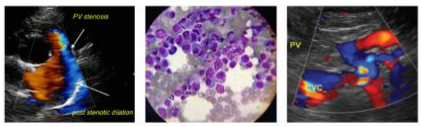



**The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.**

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I





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can be of any further assistance please contact me.

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