

**DATE PRESENTING CLINICAL SIGNS**

8/10/22

Pre-sx u/s for mass removal revealed heterogenous liver and mixed echogenic splenic nodules.

**CYTOLOGY SUBMISSION**

U/S Guided FNA: Liver and Spleen

**INTERPRETED BY**

L.D. McGill, DVM,  
Ph.D, DACVP

**OBSERVATIONS**

Liver: Submitted are 3 excellent videos of hepatocytes collected from the liver in Max. There is some anisocytosis throughout these cells. Many of the cells demonstrate vacuolization particularly in focal areas. Other areas have granularity and vacuolization. There are very few inflammatory cells interspersed throughout red blood cells surrounding the hepatocytes. Malignant criteria cannot be identified.

Spleen: Submitted are 2 excellent videos of cells collected from the spleen in Max. The cellularity is mixed. There are neutrophils interspersed with nucleated red blood cells and scattered lymphocytes. Megakaryocytes are observed. There is no suggestion of malignancy or sepsis in the collection. The cellularity is most characteristic of hematopoiesis and mild inflammation.

**PATIENT**

Max Dammann

**SPECIES**

Canine

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Liver - Moderate to severe hepatocellular vacuolization consistent with lipidosis or other fluid buildup.  
Spleen - Prominent medullary hematopoiesis with mild inflammation.

**BREED**

Beagle Mix

**COMMENTS**

The changes in the liver support metabolic liver disease which could be secondary to many different conditions. The vacuolization could be the result of steroid stimulation either as result of Cushing's or exogenous steroid therapy. There could be some nodular hyperplasia, but no other specific change is present to support neoplasia or sepsis.

**SEX**

Male Neutered

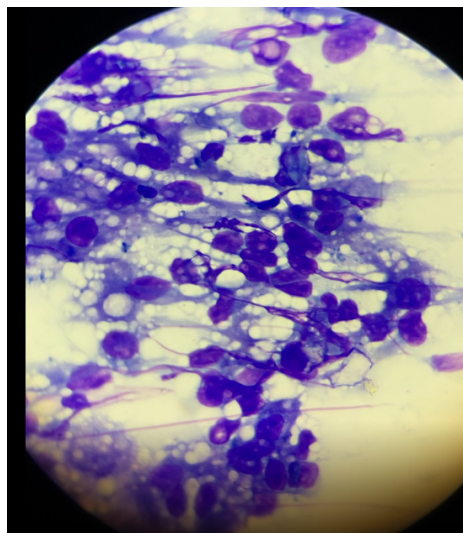
The changes in the spleen suggest mild inflammation and prominent medullary hematopoiesis. The hematopoiesis may be normal in Max or there could be some type of stimulation such as anemia. There is no suggestion of malignancy or sepsis in the spleen. With these changes, I am concerned about secondary changes in the spleen and liver. Thus, Max should be continually evaluated for other potential problems including pancreatitis, enteritis or other sources of steroid metabolic change in the liver.

**AGE**

9yr

**WEIGHT**

53.9 lbs



**HOSPITAL NAME**

Animal Care Centers

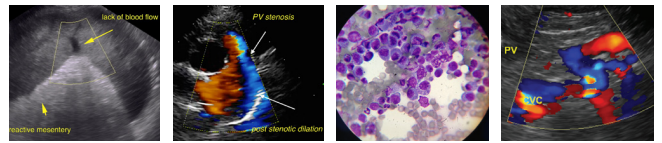
**REFERRING VET**

Dr. Hallihan

**INVOICE NUMBER**

9095

Image shows a group of hepatocytes with moderate to severe vacuolization of the cytoplasm. The nuclei are showing variation in size and shape.



**DATE**

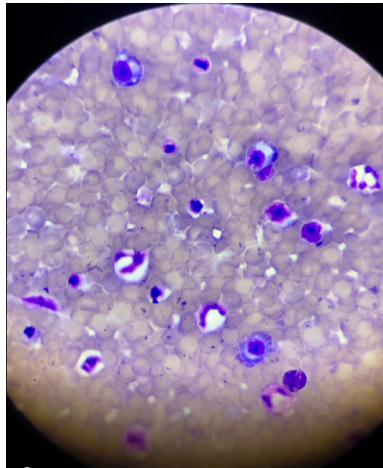
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**PATIENT**

Max Dammann



**SPECIES**

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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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