



**DATE PRESENTING CLINICAL SIGNS**

9/16/21

Ultrasonographic Findings:

- Large, irregular prostate – If this dog was neutered prior to reaching puberty (approximately 6 months of age) then this prostate is abnormal. If neutered later in life, this could represent normal involution. Recommend cytologic sampling.

**INTERPRETED BY**

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

- Severely mottled, hypoechoic spleen – The diffuse splenic changes are non-specific and could be consistent with lymphoid hyperplasia, extramedullary hematopoiesis, infiltrative neoplasia, inflammation, other. Cytology or histopathology would be necessary to get a definitive diagnosis.

- Heterogeneous liver with hypoechoic nodules – The diffuse hepatic changes are non-specific and could be consistent with vacuolar hepatopathy, nodular hyperplasia, inflammatory/immune-mediated disease, fibrosis, extramedullary hematopoiesis, toxic hepatopathy (e.g., copper), infiltrative neoplasia (less likely) or other hepatopathy.

**PATIENT**

Macho Martinez

- Large mesenteric lymph node – The moderate lymphadenopathy is concerning for (but not diagnostic for) a possible neoplastic process. Alternately, you can see significant lymphadenopathy in some cases of autoimmune/inflammatory disease, infectious disease (tick borne disease such bartonella, fungal infections, etc.). A fine needle aspirate with cytology is recommended for further evaluation.

**SPECIES**

Canine

**CYTOLOGY SUBMISSION**

**BREED**

FNA of mesenteric lymph node, spleen, prostate, and liver.

Minature Schnauzer

**OBSERVATIONS**

Liver: Submitted are large numbers of images and 1 video of cells collected from the liver in Macho. There are hepatocytes in many of the images and in the video. The hepatocytes demonstrate granularity of the cytoplasm. There are scattered neutrophils and rare lymphocytes in the surrounding parenchyma associated with red blood cells. There are no changes supportive of neoplasia or sepsis.

**SEX**

Male Neutered

Lymph node: Submitted are large numbers of images and 1 video of cells collected from the lymph node in Macho. The cellularity consists of large numbers of lymphocytes with scattered macrophages. The lymphoid cells have nuclei that are in the general size of red blood cells to 1 1/2 times the size of red blood cells. The lymphoid cells do not demonstrate atypical change. There are macrophages present with a foamy cytoplasm and scattered neutrophils.

**AGE**

14-year-old

Spleen: Submitted are large numbers of images and several videos of cells collected from the spleen in Macho. The splenic collection consists of large numbers of nucleated RBCs and aggregates of lymphoid cells which appear to be reactive. There are a few neutrophils scattered throughout and a few macrophages. The lymphoid cells are reactive but do not demonstrate atypia. The nucleated RBCs are within normal limits. Malignant criteria or specific inflammation is not identified although there are areas where there are increased numbers of neutrophils.

**WEIGHT**

N/A

**HOSPITAL NAME**

Animal Paradise Hospital

Prostate: Submitted are large numbers of images with 1 video of cells collected from the prostate. Prostatic epithelial cells were not identified. There are scattered inflammatory cells that include neutrophils and lymphocytes with one or two macrophages and packets of adipocytes. All of these cells are interspersed through RBCs. There is no suggestion of neoplasia or sepsis in this collection.

**REFERRING VET**

Dr. Elshafie

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Liver - Hepatocellular granularity with minimal vacuolization and evidence of mild inflammation

Lymph node - Reactive lymphoid tissue with macrophages and mild inflammation.

Spleen - Extra medullary hematopoiesis with focal lymphoid reactive tissue suggesting localized lymphoid hyperplasia.

**INVOICE NUMBER**

70405



**DATE** Prostate - Mild chronic suppurative inflammation with aggregates of lipid.

9/16/21 **COMMENTS**

**INTERPRETED BY**

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

The changes in the prostate could be the result of chronic fibrosis and atrophy of the prosthetic tissue. There may be mild inflammation. There is no suggestion of neoplasia or benign hyperplasia of the prosthetic tissue in this collection. My only concern is that this may not be representative of other pathologic changes if they are present.

The changes in the liver, spleen and lymph node appear to be secondary changes to inflammation either as the result of inflammation in the intestine, pancreas or other locations. The splenic changes support inflammation and hematopoiesis which is common. The lymphoid nodular hyperplasia is often a reaction to inflammation in other organs. There is no suggestion of malignancy in any of the organs nor is there evidence of sepsis. Exploratory may be required to confirm the process but in the cellularity available to evaluate, no specific disease process is identified.

**PATIENT**

Macho Martinez

**SPECIES**

Canine

**BREED**

Minature Schnauzer

**SEX**

Male Neutered

**AGE**

14-year-old

**WEIGHT**

N/A

**HOSPITAL NAME**

Animal Paradise Hospital

**REFERRING VET**

Dr. Elshafie

**INVOICE NUMBER**

70405

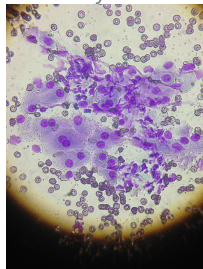


Image shows a group of representative hepatocytes with a few inflammatory cells collected from Macho. The hepatocytes show mild granularity.

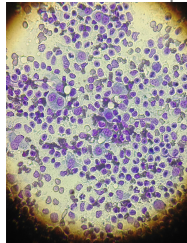


Image shows cells collected from the lymph node in Macho. The lymphocytes are small. The larger cells are macrophages. There are scattered neutrophils.

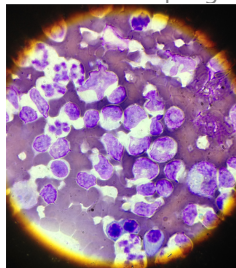


Image shows splenic cells with hematopoiesis and reactive lymphoid cells and neutrophils collected from Macho.

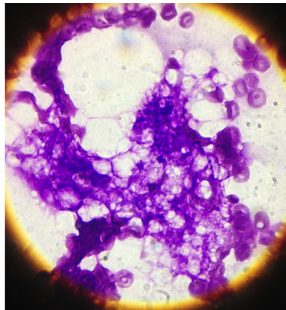


**DATE**

9/16/21

**INTERPRETED BY**

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



**PATIENT**

Macho Martinez

Image shows lipid collected from the prostate in Macho. There were scattered inflammatory cells but they are few.

**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.**

**SPECIES**

Canine

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.

**BREED**

Miniature Schnauzer

**L.D. McGill, DVM, Ph.D., DACVP**  
8288 Top of the World Drive  
Cottonwood Heights, UT 84121  
ldmcgill.vetpath@gmail.com  
cell: 801-865-1220

**SEX**

Male Neutered

**AGE**

14-year-old

**WEIGHT**

N/A

**HOSPITAL NAME**

Animal Paradise Hospital

**REFERRING VET**

Dr. Elshafie

**INVOICE NUMBER**

70405