



## PATIENT

Moka Sofia

## SPECIES

Canine

## BREED

Jack Russell

## SEX

Spayed female

## AGE

14 years

## WEIGHT

7.3 kg

## INTERPRETED BY

Dr. Lawrence McGill,  
DVM, Ph.D., Diplomate,  
ACVP

## IMAGING PERFORMED BY

Dr Iftikhar Raza

## HOSPITAL NAME

Pawsitive Veterinary  
Clinic Dubai Silicon  
Oasis

## REFERRING VET

Dr Iftikhar Raza

## INVOICE

68345

## DATE

11/5/25

## PRESENTING CLINICAL SIGNS

History: Geriatric exam performed, owner is concerned that the dog abdomen is distended. Ultrasound examination performed and found spleen echotexture is coarse and nodular lesions present, also liver parenchyma is heterogenous and multiple nodular lesions present throughout the liver parenchyma, gall bladder is showing signs of developing mucocele. Fine needle aspiration done for spleen and submitted for evaluation.

ALT - 142 (normal range 10 - 125 U/L) ALP - 390 (normal range 23 - 212 U/L) Globulin 5.2 g/dl

## CYTOLOGY SUBMISSION

FNA of the spleen and liver were submitted

## OBSERVATIONS

Spleen: Submitted are 37 good images of cells collected from the spleen in Moka. There is a background of red blood cells and fluid but there are some nucleated cells in the collection. Some of the images demonstrate minimal numbers of nucleated cells. In most of the fields, there are more lymphocytes than other cells which include neutrophils. Scattered macrophages were identified. The lymphoid cells are slightly varied with minimal atypia.

Liver: Submitted are 50 good images of hepatocytes and blood collected from the liver in Moka. There are hepatocytes in many of the images but not all. The hepatocytes demonstrate vacuolization and granularity of the cytoplasm with some evidence of swelling and scattered binucleate hepatocytes but no suggestion of neoplasia in the hepatocytes. The surrounding red blood cells and fluid include lymphoid cells and neutrophils. These cells are few in numbers. There are no characteristics of malignancy in any of the cells.

## INTERPRETATION OF FINDINGS & FURTHER RECOMMENDATIONS

Spleen - Minimal to moderate nucleated cellularity with slightly increased numbers of lymphoid cells and evidence of mild inflammation.

Liver - Consistent with hepatocellular nodular hyperplasia with mild inflammation.

## COMMENTS

The cellularity in this collection demonstrates minimal nucleated cellularity. There are increased numbers of lymphoid cells which could suggest lymphoma but it does not go farther than to suggest the possibility. This could be an inflammatory process in the spleen since there are neutrophils as well. The cellularity is not characteristic of malignancy and if this cellularity on these images is representative, then sending in the slides for PARR testing may not be successful. A guarded prognosis is warranted since the underlying process is not confirmed and lymphoma is still on the differential diagnosis.

The changes in the liver are likely secondary with evidence of nodular hyperplasia. There is no suggestion of malignancy or sepsis. These changes in the liver and spleen can be secondary to many different conditions including pancreatitis or enteritis. The liver appears to be responding with some swelling of the hepatocytes and nodular hyperplasia. The swelling could suggest increased fluid in the hepatocytes. This could be the result of circulating endotoxins from the intestine or pancreas.



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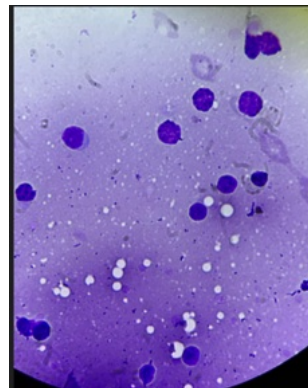
68345

## DATE

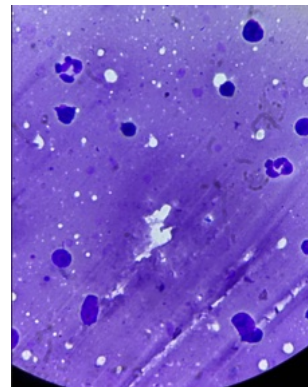
11/5/25

Continued evaluation to identify a primary source for liver cell changes and increased numbers of inflammatory cells is suggested. Lymphoma is not suggested in the liver. A guarded prognosis is warranted due to the fact that the underlying cause was not identified with these aspirates.

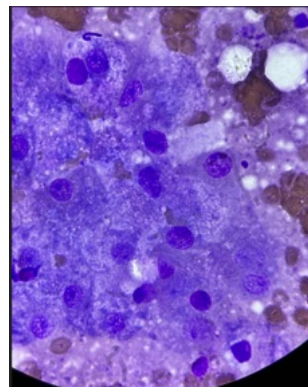
## CYTOLOGY IMAGE



This is an image that demonstrates one of the more cellular fields submitted with a good number of lymphocytes but minimal numbers of atypical lymphocytes collected from the spleen in Moka.



This is one of the images that has good cellularity from the spleen in Moka. There are neutrophils interspersed with the lymphocytes in this image.



This is an image demonstrating hepatocytes with vacuolated swollen cytoplasm and possible nodular hyperplasia in the liver sample collected from Moka.



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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 can be of any further assistance please contact me.

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

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