



**DATE PRESENTING CLINICAL SIGNS**

1/11/22

U/S performed to evaluate elevated liver enzymes:

ALT: 270 ALP: 504 GGT: 66

Abd. U/S: Large complex mass appearing to originate from Mid or Left Liver.

Has appearance of Hepatocellular Carcinoma. No obvious metastatic spread but study is pending from Sonopath for full report.

**INTERPRETED BY**

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

**CYTOLOGY SUBMISSION**

FNA of Liver

**PATIENT**

Buddy Gilliland

**OBSERVATIONS**

Liver: Submitted are 10 excellent videos of excellent collections of cells from the liver mass in Buddy. The cellularity includes large numbers of hepatocytes in all of the videos. The hepatocytes are variable in size and shape. Anisocytosis and anisokaryosis are prominent. Nucleoli are prominent. Many of the hepatocytes demonstrate moderate to marked cytoplasmic vacuolization. Other significant cellular infiltration of epithelial cells or lymphoid cells are not present. There is very minor inflammation. The cellularity demonstrates hepatocytes in groups and packets.

**SPECIES**

Canine

**BREED**

Jack Russell Terrier

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Liver - Hepatocellular proliferation suggestive of possible hepatocellular carcinoma.

**SEX**

Male Neutered

**COMMENTS**

The cellularity in this collection is almost entirely hepatocellular with irregularities of the cells. The vacuolization described could occur in cases of nodular hyperplasia or even an adenoma. The marked nuclear variation with prominent nucleoli and scattered binucleated cells suggests proliferative hepatocellular tissue. There are many cases where hepatocellular carcinomas are difficult to identify cytologically due to the fact that they may not be as pleomorphic as described in the literature. I am concerned about this possibility in Buddy. Confirmation of the diagnosis will require exploratory and excision of the mass with follow-up histopathology. A guarded to unfavorable prognosis is warranted in my opinion.

**AGE**

15 Years

**WEIGHT**

16 lbs

**HOSPITAL NAME**

Franklin Animal Clinic  
Inc.

**REFERRING VET**

Dr. Sam Doverspike

**INVOICE NUMBER**

70444



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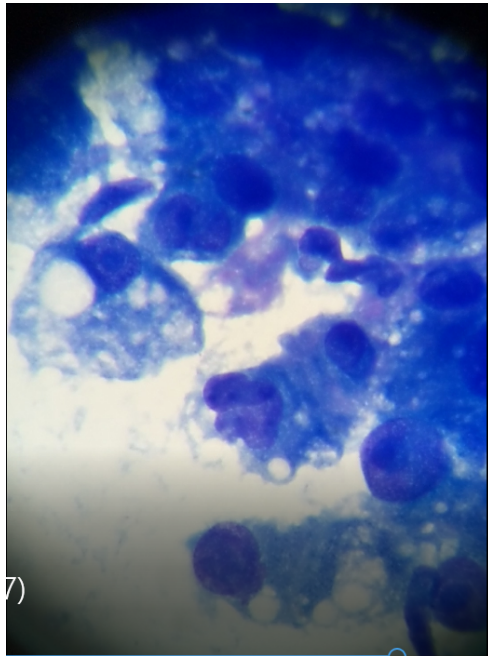


Image shows marked anisokaryosis in the hepatocytes collected from Buddy. Anisocytosis and vacuolization are prominent. There appears to be a multinucleated hepatocyte in the center.

**SEX**

Male Neutered

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.

**AGE**

15 Years

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.

**WEIGHT**

16 lbs

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