

**Report Requested By****Report Provided By**

Casey J. LeBlanc DVM, PhD,  
 Diplomate, ACVP (Clinical Pathology)  
 10401 Old Georgetown Road, Suite 100  
 Bethesda, MD, 20814  
 cleblanc@easternvetpath.com  
 Phone: 865-201-6460  
 www.easternvetpath.com

**EASTERNVETPATH-2017-017137****Patient:**

Feline | DSH | 12 years | Neutered, Male | 5.3 kg | 40929

**Closed:** 2017-04-07 10:40**Scheduled Time:** 2017-04-07 10:31**Submitted:** 2017-04-06 18:43

## Admin Details

Department	Services
Cytology	Cytology - 2 Specimens Overnight Shipping US

## Clinical History - Cytology

**History & Physical Exam Findings**

Severe hyperglobulinemia, enlarged liver and spleen on ultrasound, pancytopenia

## Standard Cytology

**Name of Anatomic Location(s)** liver and spleen  
**# of Slides** 13

## Pathological Findings - Cytology

**Diagnosis**

Liver: Plasma cell tumor and mild to moderate hepatic lipidosis

Spleen: Plasma cell tumor

**Comments**

The diagnosis of a plasma cell tumor in both locations is definitive (100% confidence). The given clinical history and cytologic findings are consistent with a diagnosis of multiple myeloma. If not already performed, recommend serum protein electrophoresis confirm the presence of a monoclonal gammopathy. Based on these finding, the pancytopenia is likely due to myelophthisis, but a bone marrow aspiration +/- core biopsy would be needed to confirm.

**Gross Description**

Thirteen slides; 9 spleen, 4 liver

**Microscopic Description**

Liver: The moderately to highly cellular slides consist of many lipid vacuoles, few disrupted cells, and an intact nucleated cell population predominated by hepatocytes found in small to large clusters. These hepatocytes exhibit a mild to moderate degree of distinct cytoplasmic vacuolation and distention consistent with lipid accumulation. These hepatocellular clusters are surrounded by a large number of atypical plasma cells that exhibit moderate anisokaryosis, occasional binucleation, a variable amount of basophilic cytoplasm, and occasional mitosis. Few leukocytes in proportions consistent with peripheral blood are also present. See photo below.

Spleen: The slides of low to moderate to high cellularity consist of few aggregates of splenic stroma, often interspersed with hemosiderin, and a nucleated cell population that includes hematopoietic precursors of various lineage and stages of maturation, mixed lymphoid cells predominated by many small lymphocytes, few plasma cells, and a very large number of atypical plasma cells are similar to those found in the liver. See photo below.

Patient: [REDACTED]

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Signed:



Casey J. LeBlanc DVM, PhD,  
Diplomate, ACVP (Clinical Pathology)  
10401 Old Georgetown Road, Suite 100  
Bethesda, MD, 20814

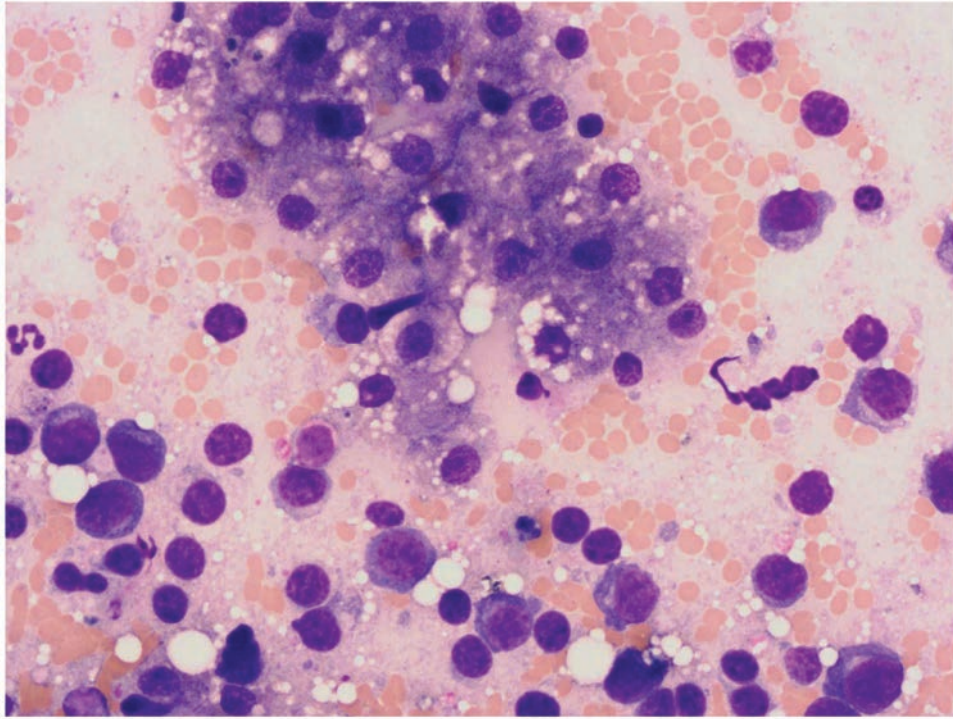
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Patient:

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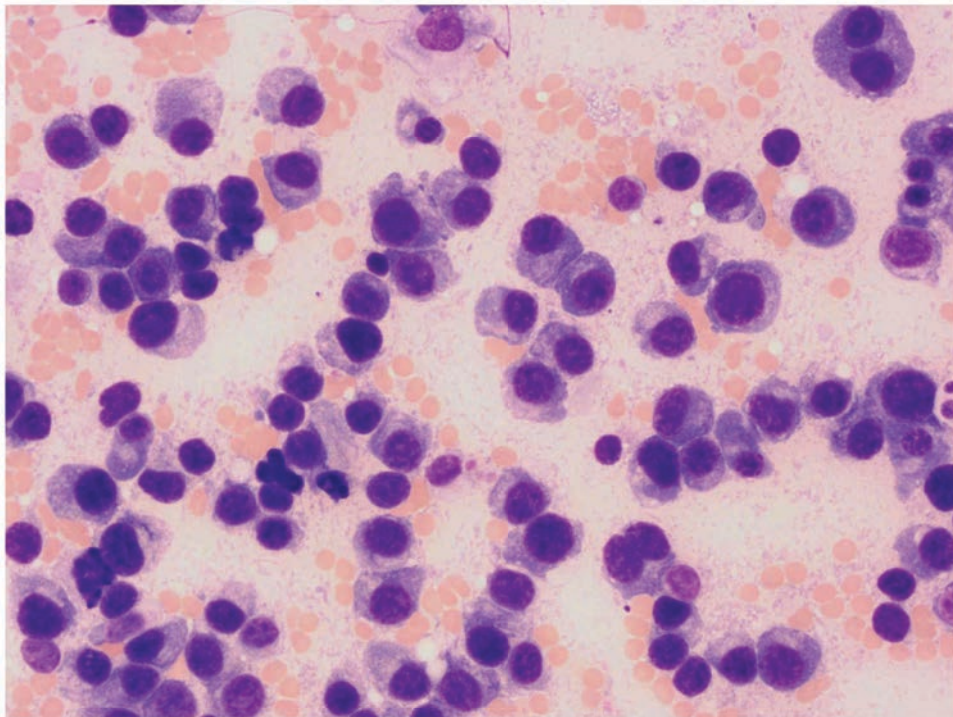
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## Featured Diagnostic Images



**Notes:** Liver: Well-differentiated hepatocytes exhibiting mild lipid vacuolation (top), surrounded by numerous atypical plasma cells

**Updated:** 2017-04-07 10:40:02



**Notes:** Spleen: Numerous atypical plasma cells exhibiting anisokaryosis, variation in N:C ratio, and binucleation

**Updated:** 2017-04-07 10:39:26