

ESVCP/ECVCP Mystery Case 2019

CONTRIBUTOR NAME*	Priscila B. S. Serpa, DVM, MSc, PhD*
CONTRIBUTOR EMAIL*	pserpa@purdue.edu
COAUTHORS	Whitney Vickery, DVM Allison R. Kendall, DVM J. Catherine Scott-Moncrieff, Vet MB, MA, MS, DACVIM Larry G. Adams, DVM, PhD, DACVIM Craig A. Thompson, DVM, DACVP Andrea P. Santos, DVM, MSc, PhD, DACVP
COMPANY OR UNIVERSITY	Purdue University

* Corresponding contributor

SPECIMEN: Nodule on left tarsus, aspirate, Modified Wright stain

SIGNALMENT: Canine, 7-year-old, male, castrated Labrador Retriever, 32.4 kg

HISTORY AND CLINICAL FINDINGS: The patient was presented to Purdue University Veterinary Teaching Hospital (PUVTH) for evaluation of a seven-month history of an intermittent non weight bearing lameness on his left hind limb. On physical examination, a slightly enlarged left popliteal lymph node was noted and a painful, small nodule was found on the medial aspect of his tarsus. Radiographs revealed a small, rounded, opaque, soft tissue nodule superimposed with the soft tissues plantar to the calcaneus without osseous involvement. Ultrasound was performed and an irregularly marginated anechoic to hypoechoic nodule with hyperechoic foci was described. A fine needle aspirate was taken and submitted for cytological evaluation. Additional findings included history of controlled diabetes mellitus, mature cataract, and anterior uveitis on both eyes. His CBC was unremarkable and chemistry panel (Vitros 5,1 FS Chemistry System, Ortho-Clinical Diagnostics, Raritan, NJ, USA) had a few changes presented below.

TEST		UNITS	REFERENCE INTERVAL
Total Protein	7.1	g/dL	4.8-6.9
Albumin	4.3	g/dL	2.3-3.9
ALT	98	IU/L	3-69
ALP	641	IU/L	20-157

Serum sample displaying moderate hemolysis and marked lipemia.

CYTOLOGICAL IMAGES:

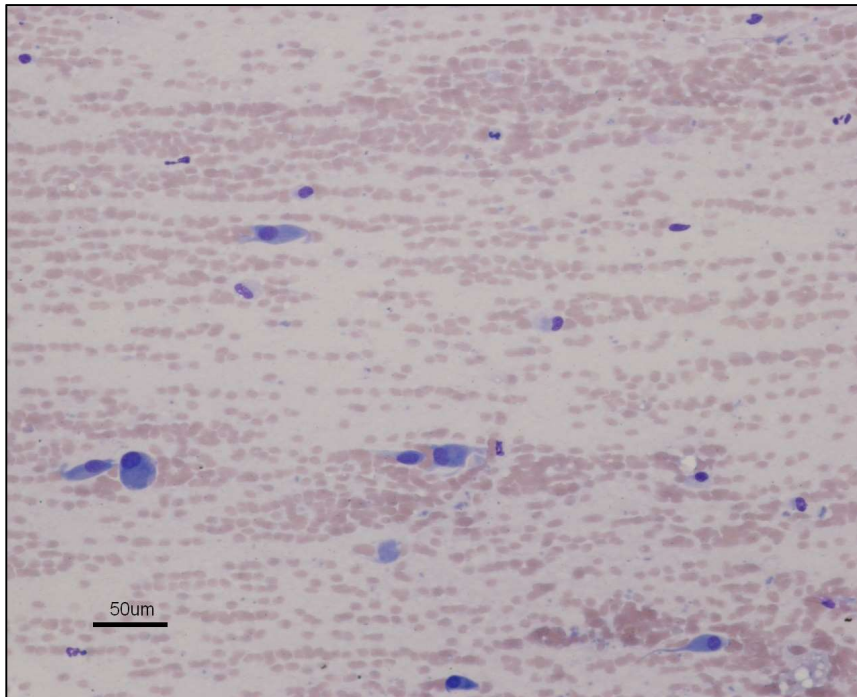


Figure 1: Overall cellularity of the nodule aspirate smear. Moderate numbers of round to spindle cells in a background with moderate hemodilution and remarkable windrowing are observed. Modified Wright stain (20x objective).

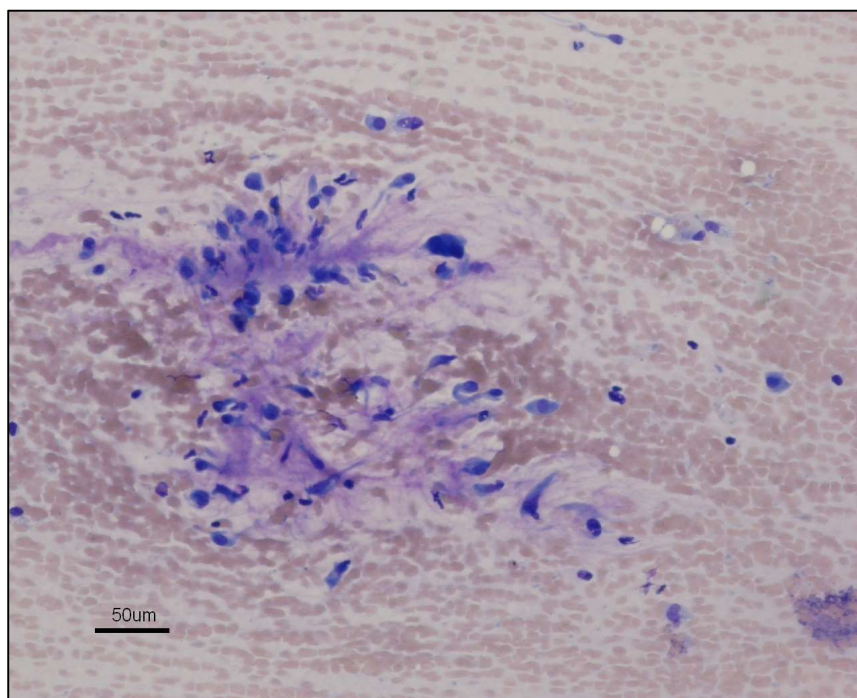


Figure 2: Occasional cells are embedded in a pink amorphous matrix. Nodule aspirate smear. Modified Wright stain (20x objective).

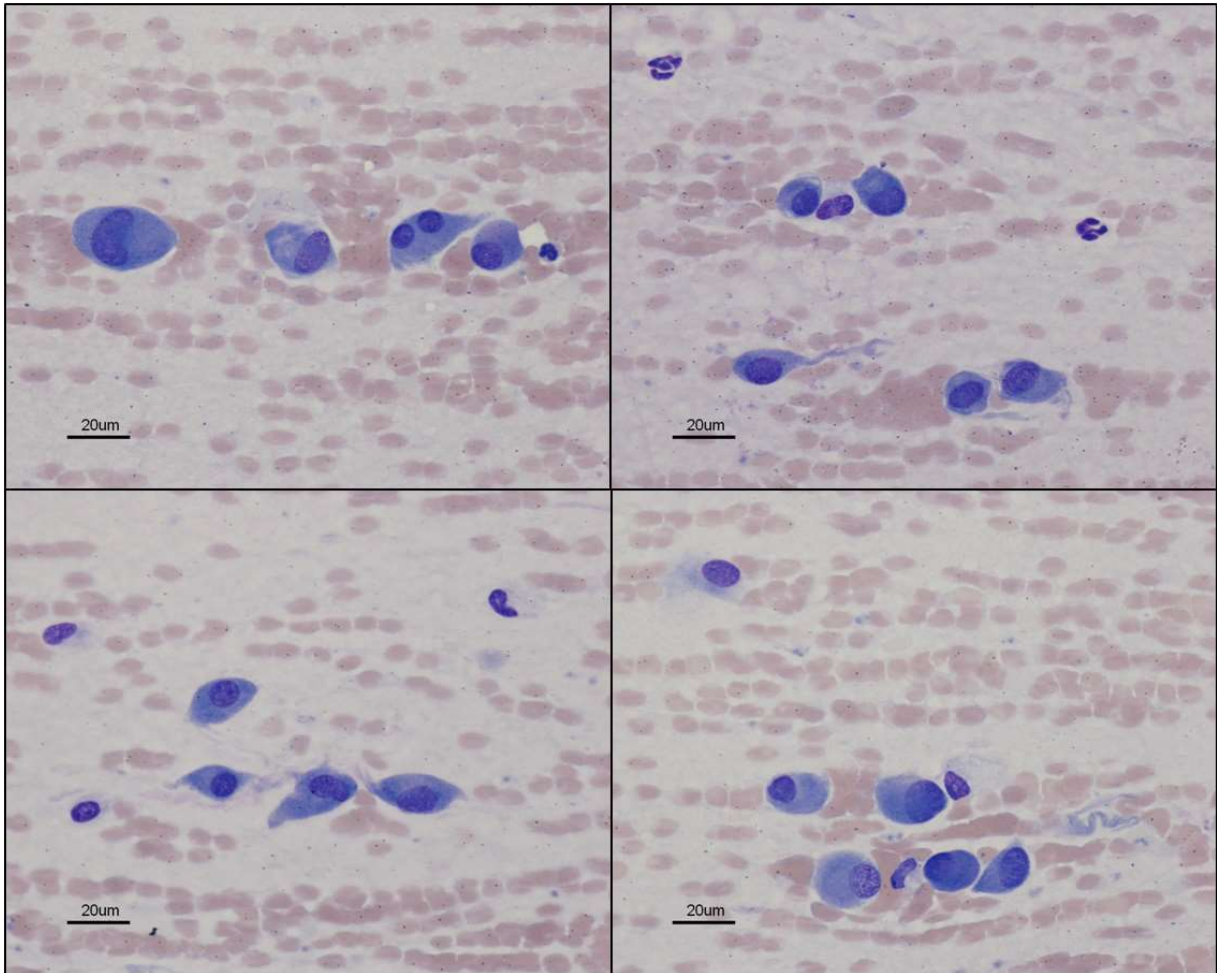


Figure 3: The cells present in the aspirate display anisocytosis, anisokaryosis, variable nuclear shape, and binucleation. Nodule aspirate smear. Modified Wright stain (60x objective).

QUESTIONS:

1. Based in the overall cellularity, background, and morphology of the nucleated cells present in the nodule aspirate, what is your primary differential diagnosis?
 - a. Histiocytic sarcoma
 - b. Myxoma/myxosarcoma
 - c. Osteosarcoma
 - d. Plasma cell tumor
 - e. Soft tissue sarcoma