



ECVP/ESVP Summer School in Veterinary Pathology

Summer School 2012 - Mock Exam

Slide no 10. Impression smear of spleen from a dog

Description

This is a highly cellular/densely cellular smear with a moderate background of erythrocytes. Many cells (\sim 50%) are large cells with abundant lightly eosinophilic cytoplasm, occasionally vacuolated, and a central to eccentrically placed oval or indented nucleus, an occasional nucleolus (macrophages). The rest of the nucleated cells (\sim 50%) consist of small mature lymphocytes, lymphoblasts and plasma cells. There is a myriad of extracellular and intracellular (macrophages) microorganisms which are round, 2-4 μ m in diameter, with a basophilic nucleus and rod-shaped kinetoplast, consistent with Leishmania amastigotes.

Morphological diagnosis/es:

Severe chronic granulomatous splenitis with intralesional protozoa

Etiology: Leishmania infantum

Design	2
Descriptive features:	
Densely cellular smear	1
50% (1) Macrophages (1)	2
Large cells (30 micron) (0,5)	0,5
with abundant eosinophilic vacuolated cytoplasm (0,5)	0,5
and central, large, round nucleus (0,5) and occasional single nucleolus (0,5)	1
50% (1) Plasma cells (0,5), lymphoblasts (0,5) and lymphocytes(0,5) (description)	2,5
Myriads of intracellular (macrophages) (1) and extracellular (1)	2
microorganisms	
Round (2-4 micron) (1)	1
With round basophilic nuclei (1) and rod-shaped kinetoplast (1)	2
Interpreted as protozoa/Leishmania amastigotes	2
Background: erythrocytes	0,5
Morphologic diagnosis/es:	3
Severe chronic (0,5) granulomatous (0,5) splenitis (1) with intralesional	
protozoa (1)	
Etiology: Leishmania infantum	2
Total	20