# ASPECTS OF LYMPH NODES CYTOMORPHOLOGY ON HORSES - THE BEGINNING CELL IMAGING OF NON-SPECIFIC LIMPH NODES PROLIFERATIONS -

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# INTRODUCTION

Pathological processes of lymph nodes are quite frequently found in human and animal pathology, so typing lymph node cell imaging have a significant importance, with anamnesis and clinical examination we obtain the certainty diagnosis.

# MATERIALS AND METHODS

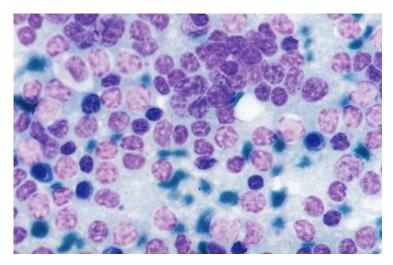
We studied the cytomorphological imaging of marrow, peripheral blood and lymph nodes of external and/or internal on 10 cases of slaughtered horses. The morphocytological investigation of smears was performed using panoptic staining (May-Grunwald Giemsa).

### RESULTS AND DISCUSSION

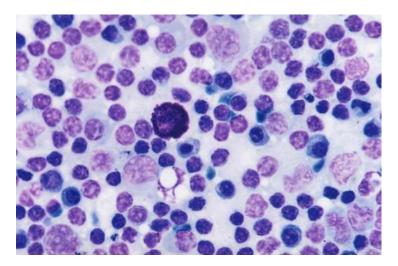
The results allowed the identification of three groups of animals with different cells imaging, as follows:

- the status of these investigated territories was for 3 animals and corresponded to an anatomo-clinical macroscopic examination as quasinormal (fig. 1);
- the status of lymph node irritation, so-called stage 0, of a global proliferation to lymph node cell populations was identified in 3cases;
- the status of massive limfoproliferation (stage 1-2), was found in 4 cases (fig. 2, 3, 4, 5, 6, 7). These cases are characterized by:
- massive lymphocytic blast with a predominance of "B" lymphocytes;

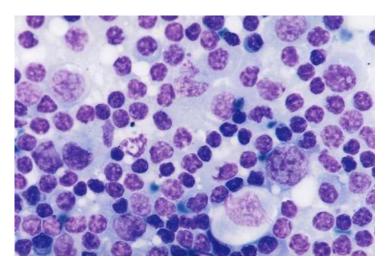
- the presence of a high number of mast cells;
- reticular cells proliferation;
- increased quantitative dendritic cells (spindle and globular).



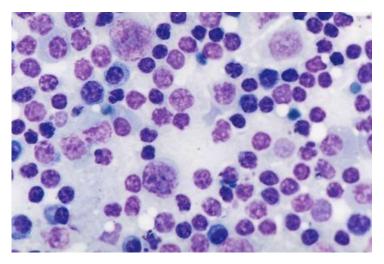
**Fig. 1 – Horse limph node -**"Quasi normal" aspect of morphological structure. Adult and semiadult lymphocytes are prevalent; rare lymphocytes, MGG, 1000 X



 $\label{eq:Fig.2-Horse limph node - Phase I - "irritation lymph node syndrome" where is a predominant multiplication of lymphoblastic elements with all the "reactive" of lymph (plasma cells, reticular cells, macrophage and mast), MGG, 1000 X$ 



 $\label{eq:Fig.3-Horse limph node - Phase I - "irritation lymph node syndrome" where is a predominant multiplication of lymphoblastic elements with all the "reactive" of lymph (plasma cells, reticular cells, macrophage and mast), MGG, 1000 X$ 



**Fig. 4 - Horse limph node -** Phase I - "irritation lymph node syndrome" where is a predominant multiplication of lymphoblastic elements with all the "reactive" of lymph (plasma cells, reticular cells, macrophage and mast), MGG,  $1000 \, \mathrm{X}$ 

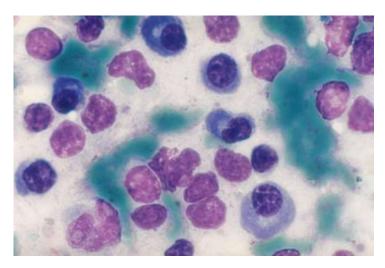
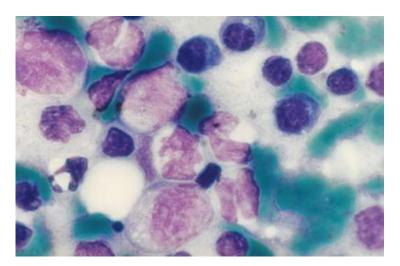
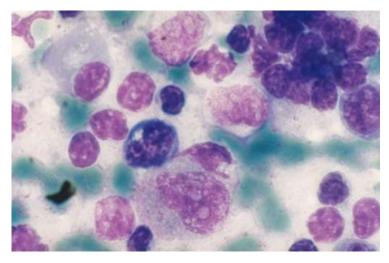


Fig. 5 - Horse limph node - The second phase of "irritation lymph node syndrome" where is a predominant cell with a "reticulosis" with obvious evolutionary trend towards a "malignant lymphoma", MGG,  $1000 \, \mathrm{X}$ 



**Fig. 6 - Horse limph node - The second phase of** "irritation lymph node syndrome" where is a predominant cell with a "reticulosis" with obvious evolutionary trend towards a "malignant lymphoma", MGG, 1000 X



**Fig. 7 - Horse limph node - The second phase of** "irritation lymph node syndrome" where is a predominant cell with a "reticulosis" with obvious evolutionary trend towards a "malignant lymphoma", MGG, 1000 X

# **CONCLUSIONS**

We highlighted "de facto", present in equine pathology, of "irritation lymph node syndrome";

This "irritation lymph node syndrome" was staged in 4 stages (1-4);

Stages 1-2 are benign totally, with a normal evolution to "restitutio ad integrum" and stages 3-4 is a state of "warning" of their increased risk for their transformation into a malignant hemopathy.

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