PARASITE FOUND IN BONE MARROW EXAMINATION OF A DOG

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Case presentation "Hector"

A 9-year old male Jack Russel Terrier (8kg body weight) was presented with polyuria, polydipsia, lethargy, anorexia and unilateral ocular opacity of 3 months duration. The symptoms were first noted during a journey through Thailand and were associated with intermittent fever. The patient also had a previous travel history to Spain and Brazil. In Thailand trypanosomiasis was suspected and therapy was initiated with diminazene aceturate (Berenil®), iron supplementation and doxycycline. The clinical signs improved but lethargy persisted. Upon return to Germany the patient showed lethargy, weight loss, cough and clinical examination by the referring veterinarian revealed pale mucous membranes. Routine hematological and biochemistry profiles revealed moderate non-regenerative normocytic normochromic anemia (Hct: 29%, reticulocytes: 14000/μl), moderate thrombocytopenia (platelets: 89x10⁹/l), marked leukopenia (leukocytes: 1.1x10⁹/l) and mild hyperglobulinemia (globulin: 61g/l). Therapy with allopurinol, itraconazol amoxicillin/clavulanic acid was initiated. Serological testing for infectious diseases was performed. Serological results were negative for Babesia sp. and Ehrlichia canis, and doubtful for *Leishmania infantum*. Direct Coomb's test was negative.

Due to the presence of pancytopenia a bone marrow sample was sent to our laboratory for cytological evaluation. No actual blood sample was submitted with the bone marrow sample.

Questions:

What is the Identify of the parasite found during bone marrow examination?

Considering the morphology of the parasite and the previous travel history to Thailand, what is the most likely diagnosis?

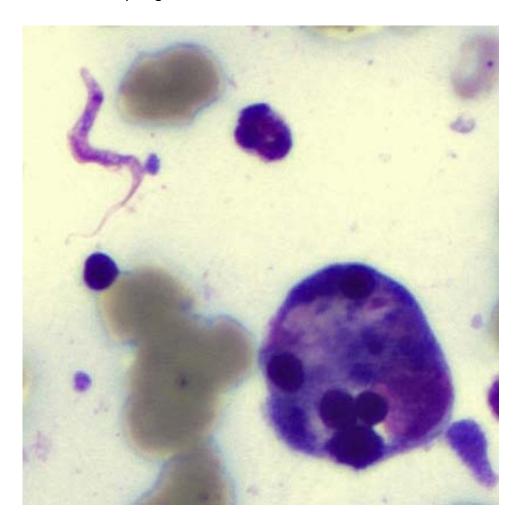


Figure 1: Bone marrow aspirate. MGG stain, x1000