بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

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Clinicopathological and Molecular Studies on Ovine Theileriosis in Egypt

Thesis presented by

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(B.V.Sc., 2015, Cairo University)

Submitted for the degree of M.V.Sc.

(Clinical Pathology)

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Supervision sheet

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Abstract

Ovine theileriosis is one of the hemoprotazoal dise**a**se that i**s** transmitted by tick bites and cause**s** severe economic loss. This study aimed to diagno**se** sheep theileriosis in 3 regions of Egypt (Cairo, Giza and Al Monofia) by using different clinicopathological, pathological and molecular tools. A total of 152 sheep blood samples were selected randomly from farms and veterinary clinics. The incidence of *Theileria* infection by microscopic examination of blood smears was 21%, while the incidence by PCR (using universal *Theileria* primer) was 36.8%. The use of species-specific primers showed a result of 53.6% single infection; *Theileria ovis*, and 46.4% mixed infection; *T. ovis* and *T. lestoquardi*. Depending on the PCR results, the samples were divided into three groups: *Theileria* negative group, *T. ovis* group and mixed *T. ovis* and *T. lestoquardi* group. The examination of all infected groups did not show an**y** significant changes between them. The hemogram showed significant macrocytic hypochromic anemia, leukopenia, neutropenia, lymphopenia, monocytopenia, eosinopenia and thrombocytopenia in *Theileria* infected groups in comparison with *Theileria* negative group. Biochemical analysis showed significant hypoproteinemia, hypoalbuminemia, total and indirect hyperbilirubinemia with elevations of AST and GGT activities and azotemia which was characterized by increase of BUN and creatinine concentrations while non-significant changes were detected in A:G ratio and direct bilirubin concentration. The pathological examination showed lymphocytic depletion and necrosis with hemorrhages in lymph nodes and spleen. Sequence and phylogenetic analysis were performed by targeting the 18S rRNA gene of *Theileria* species (GenBank Accession Numbers MT002826 and MT002827). In conclusion, this is the first report of phylogeny of *T. lestoquardi* infected sheep in Egypt.

DEDICATION

*I dedicate this work to **my family** (my parents, my wife, my brothers, my sister and my son) for their patience, love, support and encouragement to complete this thesis.*

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