شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

# بسم الله الرحمن الرحيم


HANAA ALY

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# 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

# يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

HANAA ALY

**Cairo University**
**Faculty of Veterinary Medicine**
**Department of Medicine and Infectious Diseases**

# Clinical and Laboratory Studies on Thyroid Gland Hormones in Dogs in Health and Disease

**Thesis presented by**

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**(BVSc. 2012, Faculty of Veterinary Medicine, Cairo University)**
**For degree of M.V.Sc**
**(Internal Medicine)**

**Under supervision of**

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## SUPERVISION SHEET

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## Abstract

Total number (No.) of 441 dogs was examined during the period of 2018 till 2020. These animals were admitted to a private clinic in Cairo Governorate, Egypt for various clinical manifestations. Of 441 dogs enrolled, only 82 dogs showed a reduction in TT4, 403 affected have features of hypothyroidism and 38 dogs clinically healthy showed no signs of disease consider as control group. Animals were thoroughly examined and clinical signs and epidemiological data include age, sex, season and dog breeds were recorded. Blood samples were collected from the jugular or cephalic vein from each dog in lithium heparin cups or on plain tube for serum separation. Heparinized blood or serum were used to determine TT4 levels using veterinary specific kits (Catalyst total T4 slide) and Catalyst One Chemistry Analyzer, IDEXX laboratories , Inc, Westbrook, Maine, according to the manufacturer's instruction, for screening incidence of hypothyroidism in the examined dogs. Data are represented as Mean ± SE, data set was compared using graphpad PRISM, P value < 0.05 considered significant.

Hypothyroidism showed higher incidence in middle aged dogs (1-5 years), in males compared to females, in autumn than other seasons, and in large dog breeds. TT4 levels in this study ranged between 0.5-1 µg/dl with mean 0.8 ± 0.017. TT4 should be put in consideration during diagnosis of suspected cases related to dermatological, gynecological, otitis, CNS, tumors, dwarfism, cardiac, GIT, low BCS, obesity, eye and mixed signs. Special care should be associated with sharp decrease in TT4 in cases of CNS.

**Key Words:** Canine, thyroid hormones, hypothyroidism features.

# *DEDICATION*

*I dedicate this work to my parents and sisters for all the support they lovely offered during my post-graduate studies.*

# *ACKNOWELDGEMENT*

## *In the name of Allah the Most Merciful and Most Gracious*

*I wish to express my sincere gratitude, thanks and greatest appreciation for all encouraged me along this thesis work.*

*It is a great pleasure to me to record my indebtedness to* ***Professor Dr. Taher Ahmad Mahmoud Baraka,*** *Professor of Internal Medicine, Faculty of Veterinary Medicine, Cairo University, for his continuous guidance, encouragement, criticism this work, his stimulating supervision and critical reviewing through finishing this thesis. And his invaluable effort made possible the achievement of this thesis.*

*Heartfelt thankfulness goes to* ***Professor Dr. Haithem Ali Farghali,*** *Professor of Surgery, Anesthesiology and Radiology, Faculty of Veterinary Medicine, Cairo University, who has given me valuable guidance and interest, for the continuous support, his supervision, consistent scientific advice and guidance and space to conduct this thesis and continuous help and support.*

*I sincerely thank* ***Dr. Hitham Abdel-Saeed Mohamed,*** *Assistant Professor of Internal Medicine, Faculty of Veterinary Medicine, Cairo University for his kindness, guidance and help.*

***Finally deep thanks to my family members for their continuous support and lovely wishes.***

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