



شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



شبكة المعلومات الجامعية  
@ ASUNET



# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

## قسم

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



## يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of  
15-25- c and relative humidity 20-40%

# بعض الوثائق الأصلية تالفة

# بالرسالة صفحات لم ترد بالاصل



617,539

# **EVALUATION OF AUTOIMMUNITY IN BENIGN EUTHYROID GOITER**

**Thesis**

31770P

**Submitted to the faculty of medicine,  
Alexandria University**

**In partial fulfillment of the requirements for the  
Degree of master in internal medicine**

**By**

**Mohammed Ramadan Mohamed  
MBBch Alex**

**Faculty of medicine  
Alexandria University  
2005**

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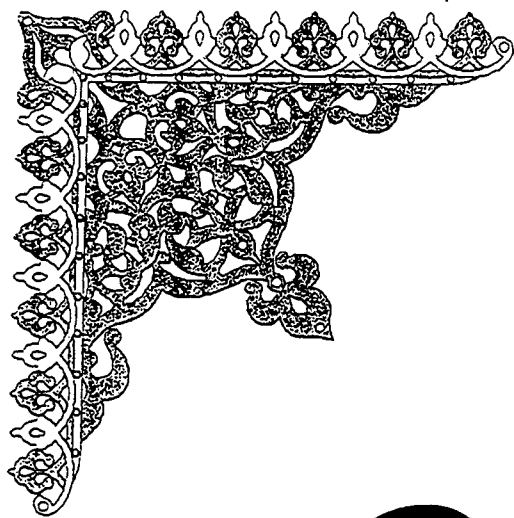
**DR. MOHAMED MOUSTAFA MOHAMED RIZK**

professor of Clinical and chemical Pathology

Faculty of medicine

University of Alexandria

for his experience in laboratory Investigations



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا  
عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

(البقرة: 32)







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PROTOCOL

ARABIC SUMMARY



## AKNOWLEDGMENTS

First of all , I have to thank *prof. Dr. Ahamed Gamal EL Din Gamal El Din*, professor of internal medicine and head master of Endocrinology department ,faculty of medicine ,university of Alexandria, for his parenthood attitude ,moral support and endless scientific advice .

I wish to express my deepest gratitude and feelings of appreciation towards *prof.Dr.Gamal Ossman El Bassiuony*, professor of internal medicine ,faculty of medicine ,university of Alexandria , for his valuable efforts in performing these cases and his valuable supervision and constructive guidance throughout this work.

The completion of this work has been impossible without the aids of *Dr.Aliaa Aly Elaghoury* ,assistant professor of internal medicine ,faculty of medicine,university of Alexandria ,whose close supervision ,criticism and helpful comments have left their mark on every aspect of this study .

I am greatly indebted to *prof.Dr.Mohamed Moustafa Rizk*, professor of clinical and chemical pathology ,faculty of medicine ,university of Alexandria ,for his continous follow up of this work and for the time and effort he gave to review and refine every step in it.

Thanks are extended to all memebers of the Endocrinology unit , for their suggestion and help in the prepararion of the thesis.

# **INTRODUCTION**

## *Introduction*

### **THYROID ANATOMY**

The thyroid is a brownish-red and highly vascular gland placed anteriorly in the lower neck, extending from the level of the fifth cervical vertebra down to the first thoracic. The gland varies from an H to a U shape and is formed by 2 elongated lateral lobes with superior and inferior poles connected by a median isthmus overlying the second to fourth tracheal rings. Occasionally, the isthmus is absent and the gland exists as 2 distinct lobes. Each lobe is 50-60 mm long . Thyroid weight varies but averages 25-30 g in adults (slightly heavier in women)<sup>(1)</sup>. Under the middle layer of deep cervical fascia, the thyroid has an inner true capsule, which is thin and adheres closely to the gland with continuations as septae into the gland, dividing it into lobes and lobules. The lobules are composed of follicles, the structural units of the gland, consisting of a layer of simple epithelium enclosing a colloid-filled cavity. Epithelial cells are of 2 types: principal cells (ie, follicular) and parafollicular cells (ie, C, clear, light cells). Principal cells are responsible for formation of the colloid (iodothyroglobulin), whereas parafollicular cells produce the hormone calcitonin.<sup>(2)</sup> The arterial supply to the thyroid gland comes from the superior and inferior thyroid arteries and, occasionally, the thyroidea ima. These arteries have abundant collateral anastomoses with each other, both ipsilaterally and contralaterally. The



thyroid ima is a single vessel, which originates, when present, from the aortic arch or the innominate artery and enters the thyroid gland at the inferior border of the isthmus. <sup>(3)</sup>