



شبكة المعلومات الجامعية

شبكة المعلومات الجامعية
@ ASUNET





شبكة المعلومات الجامعية



شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكرو فيلم



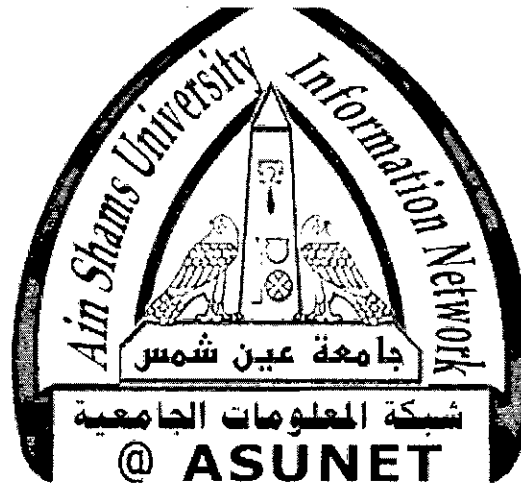
شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكرو فيلم

قسم

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



يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %



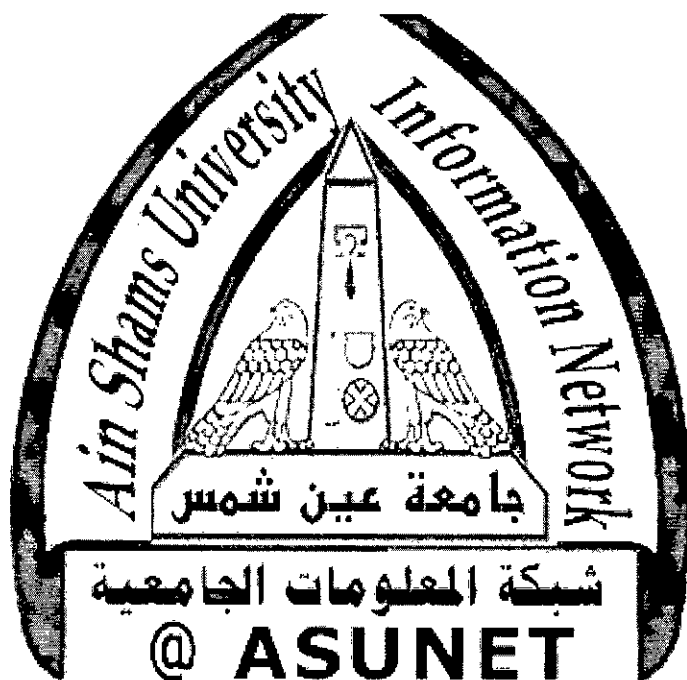
شبكة المعلومات الجامعية



بعض الوثائق الأصلية تالفة



شبكة المعلومات الجامعية



بالرسالة صفحات

لم ترد بالأصل



**ESTIMATION OF THE LEVEL OF ATRIAL
NATRIURETIC PEPTIDE IN NORMAL
AND IN PATIENTS WITH CHRONIC
HEART FAILURE**

THESIS

SUBMITTED FOR PARTIAL FULFILLMENT OF
MASTER DEGREE IN PHYSIOLOGY

BY

NAWAL BADAWY ALI

SUPERVISED BY

PROF. DR. GALAL MOHAMED ABD EL-KADER

**PROF. & HEAD OF PHYSIOLOGY DEPARTMENT
SOHAG FACULTY OF MEDICINE**

PROF. DR. INWAR SAYED MOHAMED

**PROF. & HEAD OF PHYSIOLOGY DEPARTMENT
ASSIUT FACULTY OF MEDICINE**

DR. LOTFY HAMED ABOU EL-DAHAB

**ASSIST. PROF. OF MEDICINE
SOHAG FACULTY OF MEDICINE**

1999



**ESTIMATION OF THE LEVEL OF ATRIAL
NATRIURETIC PEPTIDE IN NORMAL
AND IN PATIENTS WITH CHRONIC
HEART FAILURE**

THESIS

**SUBMITTED FOR PARTIAL FULFILLMENT OF
MASTER DEGREE IN PHYSIOLOGY**

BY

NAWAL BADAWY ALI

SUPERVISED BY

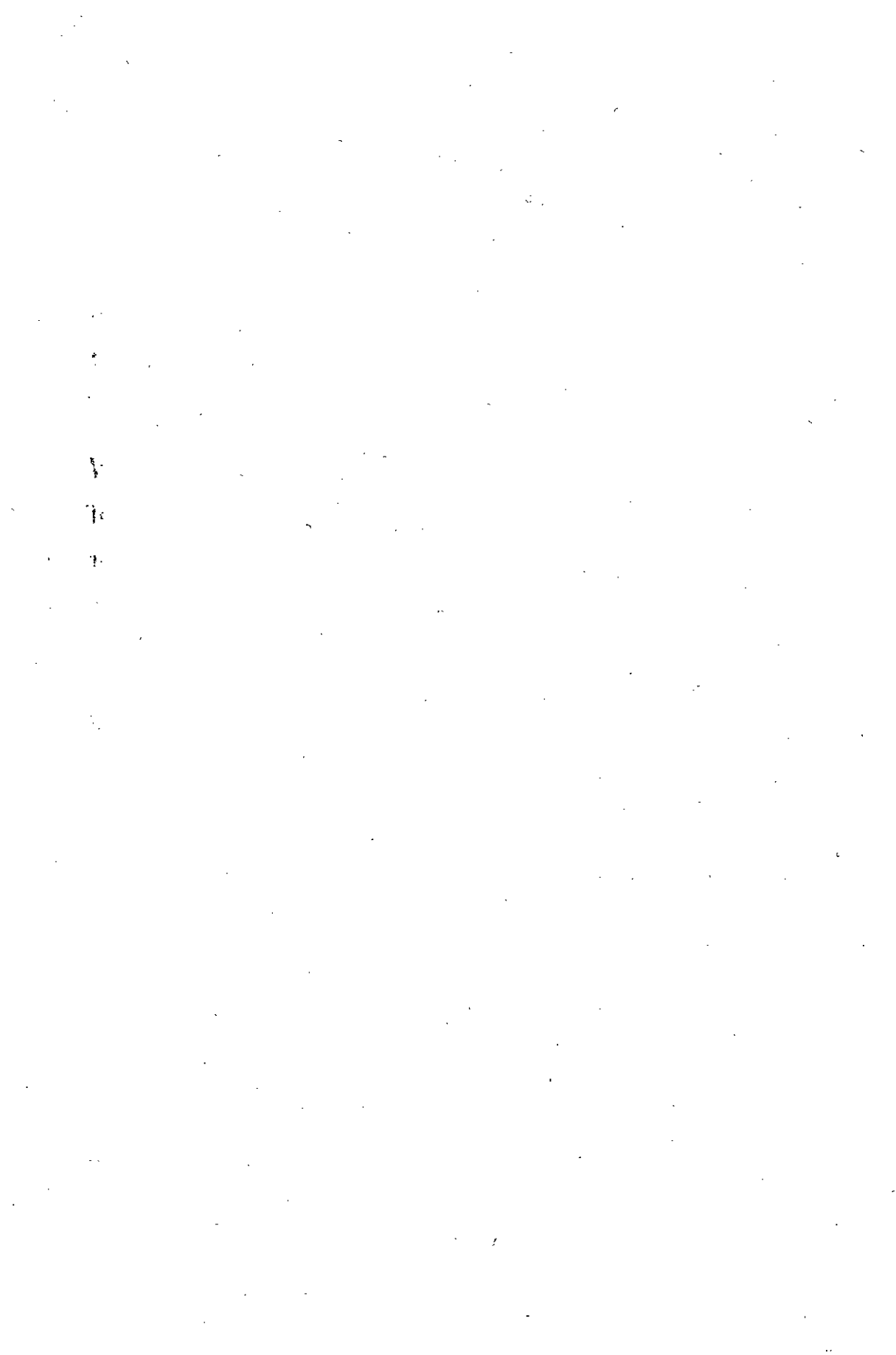
PROF. DR. GALAL MOHAMED ABD EL-KADER

**PROF. & HEAD OF PHYSIOLOGY DEPARTMENT
SOHAG FACULTY OF MEDICINE**

PROF. DR. ANWAR SAYED MOHAMED

**PROF. & HEAD OF PHYSIOLOGY DEPARTMENT
ASSIUT FACULTY OF MEDICINE**

ACKNOWLEDGMENT



ACKNOWLEDGMENT

Thanks to our merciful GOD for various blessings.
Thanks to GOD once more for enabling me to prepare this thesis hoping that it might be useful for those who will read it.

I am deeply indebted to *Professor Dr. Galal Mohamed Abd El-Kader*, Professor and Head of Physiology Department, Sohag, Faculty of Medicine for his valuable supervision, supporting advice, continuous encouragement and kind help all through this work.

I take this opportunity to express my ever lasting thanks to *Professor Dr. Anwar Sayed Mohamed*, Professor and Head of Physiology Department, Assiut Faculty of Medicine for his kind supervision, sincere help continuous encouragement in supervising this thesis.

My deep appreciation is due to the guidance and the valuable help given to me by *Dr. Lotfy Hamed Abou El-Dahab*, Assistant Professor of Medicine, Sohag, Faculty of Medicine.

Many thanks are offered to all residents of medicine department for their help in the research.

CONTENTS

CONTENTS

	Page
INTRODUCTION AND AIM OF THE WORK.....	1
REVIEW OF LITERATURE.....	2
Atrial natriuretic peptide (ANP).....	2
– Histological basis.....	3
– Chemistry of ANP.....	3
– Biosynthesis of ANP.....	5
– Metabolism of ANP.....	6
– Plasma levels of ANP.....	7
– ANP receptors.....	8
Factors which affect ANP secretion.....	12
– Atrial distension caused by volume expand.....	12
– Sympathetic venous system activity.....	13
– Salt intake.....	14
– Posture.....	15
– Body built and weight.....	15
– Disease states in man.....	15
– ANP with aging.....	16
– Circadian rhythm of ANP.....	17
Effects of ANP on different body systems.....	19
– Cardiovascular effects.....	19
– Effect of ANP on coronary arteries in humans...	20
– Effect on blood pressure.....	20
– Effect on the heart rate.....	21
– Renal effects.....	23
– Effect of calcium on renal actions of ANP.....	27
– Extra renal effect of ANP on body fluids.....	28
– Actions on renin-angiotensin aldosterone system	29