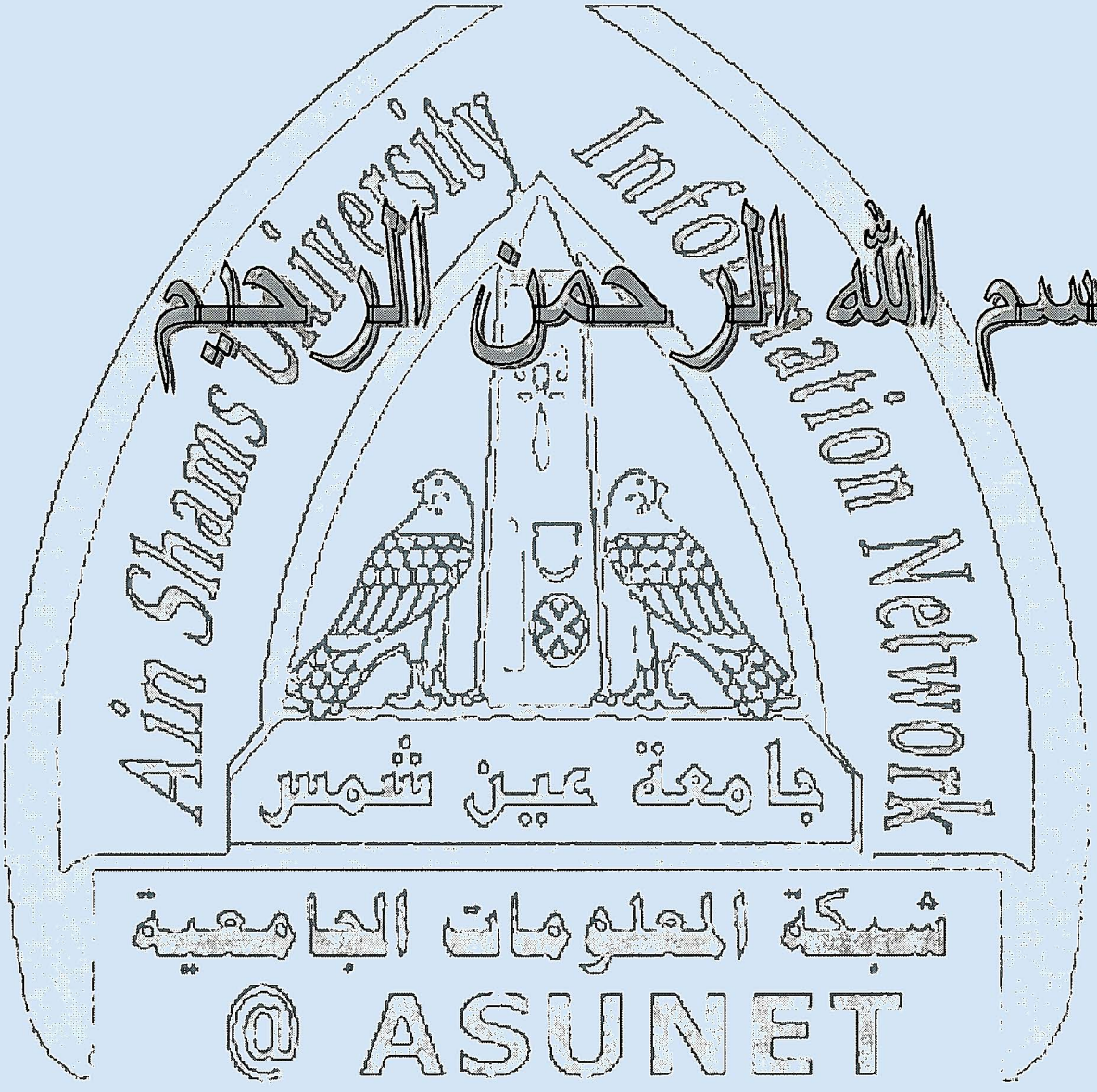
شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

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%

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

بعض الوثائق الاصلية تالفة

STUDIES OF SERUM ANGIOTENSIN CONVERTING ENZYME IN DIABETES MELLITUS

Thesis
Submitted to the

Biochemistry Department
Faculty of Science
Ain Shams University

In Partial Fulfilment of the Requirements
for the Degree of Master of Science

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Al-Azhar University

1997

بسم الله الرحمن الرحيم

﴿وقل ربِ زدنى علماً﴾

صدق الله العظيم

To My

Parents

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STUDIES OF SERUM ANGIOTENSIN CONVERTING ENZYME IN DIABETES MELLITUS

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ABSTRACT

The objective of this study was to estimate the changes in serum ACE in NIDDM and finding the relation between its possible changes to the onset of diabetic vascular complications. Also to examine its relation with state of metabolic control.

This work was done on 70 subjects divided into 20 healthy persons served as control group and 50 NIDDM, they represented diabetic patients these intrun were divided into 20 diabetic patients without complications and 30 diabetic patients with complications , these intrun were divided into three groups , 10 diabetic patients with retinopathy , 10 diabetic patients with nephropathy and 10 with renal failure .

Our results revealed a highly significant increase of serum ACE in diabetic patients without and with complications in comparing to its level in control group , Significant increase of ACE level in diabetic patients with complications compared to its level in diabetic without complications.

There was a significant difference in ACE in those with micro or macroalbuminuria compared to those without nephropathy . There was a statistically significant increase in ACE level in diabetic patients with retinopathy compared to those without complications. Significant correlations were observed between ACE and fasting , post - prandial , fructosamine , systolic and diastolic blood pressure in all cases. Also there was a significant correlation between ACE and microalbuminuria in all cases except renal failure . In ten cases of diabetic patients with renal failure there was a significant correlation between ACE and serum creatinine.

List of Abbreviations

1. ACE :	Angiotensin - converting enzyme
2. ANG I :	Angiotensin I
3. ANG II :	Angiotensin II
4. BM :	Basement membrane
5. CRF :	Chronic renal failure
6. DBP:	Diastolic blood pressure
7. F.B.G :	Fasting blood glucose
8. F.amine :	Fructosamine
9. G F R :	Glomerular filtration rate
10. Gly -Gly	Glycyl - Glycine.
11. Hip - Gly -Gly	Hippuryl - Glycyl Glycine
12. HLA :	Human leukocyte antigen
13. 2h.BG :	2 hours blood glucose
14. IDDM :	Insulin dependent diabetes mellitus
15. IGT :	Impaired glucose tolerance
16. Mic. Alb :	Microalbuminuria
17. NDDG:	National diabetic data group
18. NIDDM :	Non insulin dependent diabetes mellitus.
19. P.P.B.G :	Post prandial blood glucose
20. SBP:	Systolic blood pressure

LIST OF TABLES