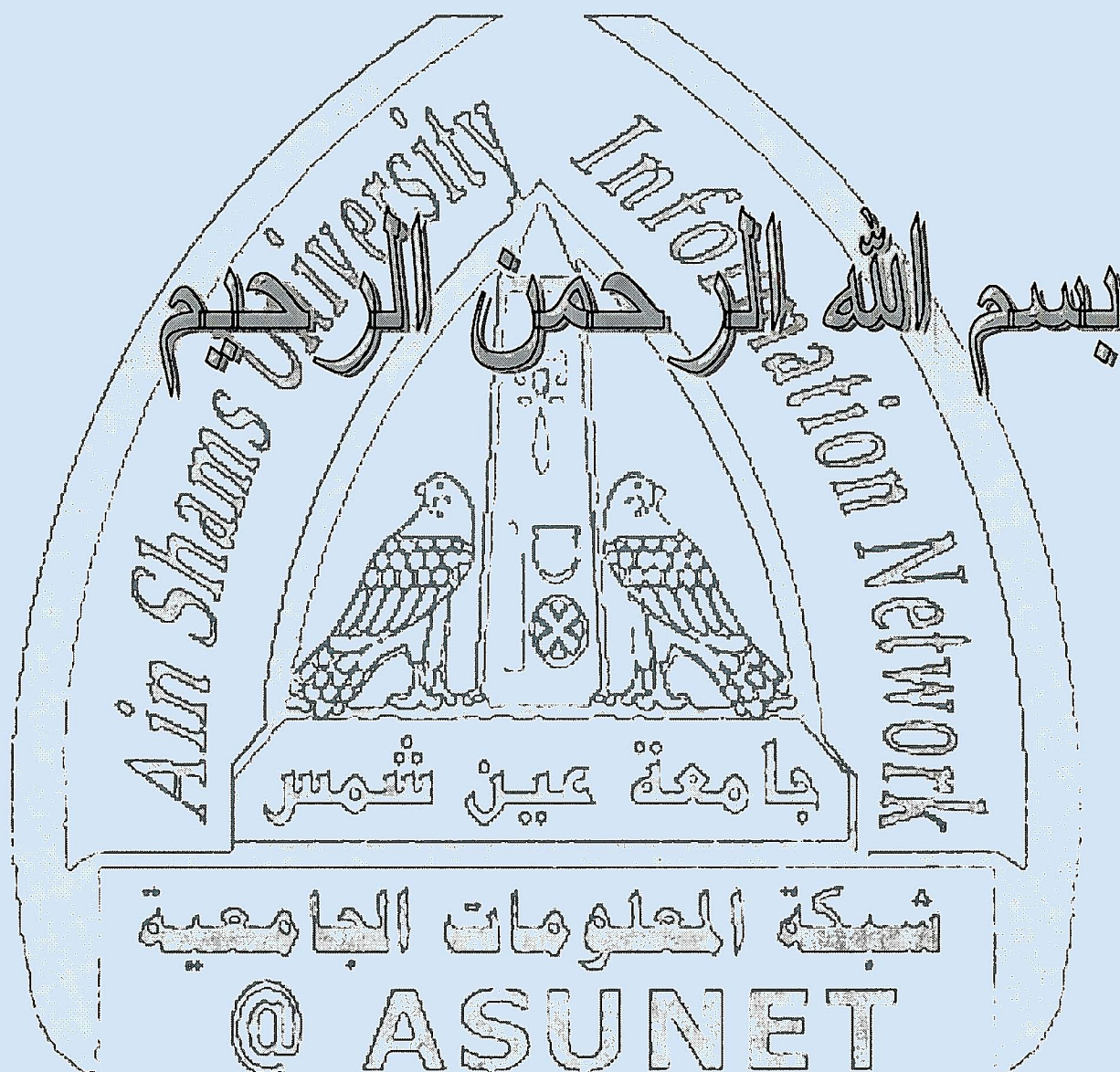




شبكة المعلومات الجامعية





شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

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يجب أن

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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم

بعض الوثائق الأصلية تالفة

STUDIES OF SERUM ANGIOTENSIN CONVERTING ENZYME IN DIABETES MELLITUS

Thesis
Submitted to the

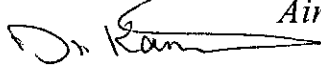
Biochemistry Department
Faculty of Science
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In Partial Fulfilment of the Requirements
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1997

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿وَقُلْ رَبِّ زِدْنِي عِلْمًا﴾

صَدَقَ اللَّهُ الْعَظِيمُ

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 |

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