بسم الله الرحمن الرحيم

شبكة المعلومـــــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـــســـم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية 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 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

Effect of Fosinopril on Some Serum Constituents in Experimentally Induced Diabetes Mellitus in Rats

Thesis
Submitted for the Partial Fulfillment of the M.D. Degree in Pharmacology

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1999

جامعة القاهرة / كلية الطب
القصر العيني

محضر

أجتماع لجنة الحكم على الرسالة المقدمة من
الطبيبة / أماني نبيل شفيق نعمة الله
توطئة للحصول على درجة الماجستير / الدكتوراة
في الفارماكولوجي

تحت عنوان : باللغة الانجليزية : Effect of Fosinopril on Some Serum Constituents in Experimentally Induced Diabetes Mellitus in Rats.

: باللغة العربية : تأثير "الفوزينوبريل" على بعض مكونات مصل الدم في فئران التجارب ذات البوال السكري

بناء على موافقة الجامعة بتاريخ ٣٠ / ١٢ / ١٩٩٨ تم تشكيل لجنة الفحص والمناقشة للرسالة المذكورة أعلاه على النحو التالي :-

١) أ.د. محمد الدسوقي الهيصة - أستاذ فارماكولوجي - طب القاهرة
و أ.د. ... أستاذ ... الأمراض الباطنة - كلية الطب - طب القاهرة } عن المشرفين
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بعد فحص الرسالة بواسطة كل عضو منفردا وكتابة تقارير منفردة لكل منهم انعقدت اللجنة مجتمعة في يوم الخميس بتاريخ ١١ / ٢ / ١٩٩٩ بقسم ... الرسالة ... بكلية الطب - جامعة القاهرة وذلك لمناقشة الطالب في جلسة علنية في موضوع الرسالة والنتائج التي توصل إليها وكذلك الأسس العلمية التي قام عليها البحث ٠

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توقيعات أعضاء اللجنة :-

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Introduction

Diabetes mellitus is a major health care issue. It is not a single disease entity, it is a systemic disease that includes a variety of metabolic disorders ***(Ziemmet and Kelly, 1992)***.

The chronic hyperglycemia of diabetes is associated with long-term damage, dysfunction and failure of various organs, especially the eyes, kidney, nerves, heart and blood vessels (The Expert Committee on The Diagnosis of D.M., 1997).

Premature cardiovascular disease resulting from accelerated atherosclerosis is one of the most common and serious complications of diabetes ***(Sharpe et al., 1988)***.

The frequency of hyperlipidemia in diabetes is indeed very high, depending on the type of diabetes and its degree of control ***(Balassa, 1985)***. It consists of hypertriglyceridemia with raised VLDL, total cholesterol and LDL.

The class of angiotensin-converting enzyme (ACE) inhibitors has emerged as one of the most important to modern cardiovascular medicine. Its efficacy in the treatment of hypertension, congestive heart failure, ventricular dysfunction and diabetic nephropathy has been established ***(Krommer et al., 1990 ; Morgan and Andersson, 1992 ; Böhlen et al., 1994)***.

Fosinopril (monopril) is the ester produg of an angiotensin-converting enzyme (ACE) inhibitor, fosinoprilat. It is the first member of a novel chemical class of angiotensin-converting enzyme (ACE) inhibitors, the phosphinic acids ***(Hui et al., 1991).***

In the present work, the effect of the angiotensin-converting enzyme (ACE) inhibitor "fosinopril" on the plasma glucose, serum triglyceride, total serum cholesterol, high-density lipoprotein cholesterol and low-density lipoprotein cholesterol was investigated in experimentally induced type I diabetes mellitus (IDDM) in rats.

The Renin-Angiotensin System

Tiegerstedt and Bergman in 1898, demonstrated that saline extracts of the kidney elicited a very potent pressor response because they contained a pressor substance which they named renin. In 1934, ***Goldblatt*** and his colleagues showed that sustained hypertension could be produced by clamping the renal artery of a dog. In 1940, ***Braun-Menendez*** and his colleagues in Argentina and ***Page and Helmer*** in the United state reported that renin was an enzyme that acted on a plasma protein substrate to catalyze the formation of the actual pressor material, a peptide, which was named hypertensin by the former group and angiotonin by the latter. These two terms persisted for nearly 20 years, until it was agreed to rename the pressor substance angiotensin and to call the plasma substrate angiotensinogen. In the mid-1950s, two forms of angiotensin were recognized, the first a decapeptide (angiotensin I) and the second an octapeptide (angiotensin II) formed by enzymatic cleavage of angiotensin I by another enzyme, termed angiotensin converting enzyme. The octapeptide was shown to be more active form ***(Skeggs et al., 1954)***.

Further progress came in 1958, when ***Gross*** suggested that the renin-angiotensin system was involved in the regulation of aldosterone secretion.

In 1965, ***Ferreira*** described bradykinin-potentiating factor, which was present in the venom of the Brazilian pit viper, Bothrops Jararaca.