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
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15 – 25c and relative humidity 20-40 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

Assessment of Left Ventricular Functions Before and After Triemtazidine in Diabetic Ischemic Cardiomyopathy

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وَعَلَّمَكَ مَا لَمْ تَكُنْ تَعْلَمُ وَكَانَ فَضْلُ اللَّهِ عَلَيْكَ عَظِيمًا

(الآية ١١٣ سورة النساء)

جامعة القاهرة / كليه الطب
الدراسات العليا

محضر
اجتماع لجنة الحكم على الرسالة المقدمة من
الطبيب / محمد حمدي محمد صالح
توطئة للحصول على درجة الماجستير / الدكتوراه
فى
==========

تحت عنوان : باللغة الانجليزية : Assessment of left ventricular function before and after trimetazidine in diabetic ischemic cardiomyopathy

باللغة العربية : تقييم وظائف البطين الأيسر قبل وبعد استخدام عقار التراميتازيدين في مرضى البول السكري المصابين بتضخم احتقاني بعضلة القلب لقصور الدورة التاجية

بناء على موافقة الجامعة بتاريخ ٢١ / ١٢ / ٢٠٠٥ تم تشكيل لجنة الفحص والمناقشة للرسالة المذكورة أعلاه على النحو التالي :-

١. أ.د/ حاتم حامد الأحوص .... عن المشرفين
٢. أ.د/ حسن محمد صالح .... ممتحن داخلي
٣. أ.د/ عادل امام .... ممتحن خارجي

بعد فحص الرسالة بواسطة كل عضو منفردا وكتابة تقارير منفردة لكل منهم انعقدت اللجنة مجتمعة في يوم الأربعاء بتاريخ ١ / ٢ / ٢٠٠٦ بقسم الحالات الحرجة بكلية الطب – جامعة القاهرة وذلك لمناقشة الطالب في جلسة علنية في موضوع الرسالة والنتائج التي توصل اليها وكذلك الأسس العلمية التي قام عليها البحث .

قرار اللجنة : قبول الرسالة شكلا وموضوعا من حيث البحث دراسة مقارنة بين مجموعتين تعاني من ضعف العضلة نتيجة قصور الشريان التاجي مصحوب بمرض البول السكري [illegible] أظهرت النتائج تحسن وظائف العضلة المجموعة التي استخدمت عقار التراميتازيدين عن مجموعة الضبط التي لم تستخدم

توقيعات أعضاء اللجنة :-

المشرف الممتحن	الممتحن الداخلى	الممتحن الخارجى
[signature]	[signature]	[signature]

عصام

Abstract:

Ishcemia initially induces reversible metabolic, mechanical and electrocardiographic (ECG) changes in the heart. Metabolic changes in the ischemic myocardium arise from the decrease in glucose oxidation. Pharmacological manipulation of cellular energy metabolism, appears to be a rational approach and Trimetazidine (TMZ) is a representative of a new class of metabolic agents with a myocardial anti-ischemic effect achieved independently of changes in the oxygen supply to demand ratio. Diabetic patients may gain a specific benefit as metabolic alterations consequent to DM are closely linked to the accumulation of various acyl carnitine and co-enzyme derivatives.

The purpose of the present study is to determine the effect of TMZ on cardiac function in diabetic patients with IHD. To achieve this purpose we studied 21 diabetic patients (pts) with ischemic cardiomyopathy (CM) (19 M, 2 F mean age 57.5±4.2). IHD was diagnosed by clinical history in all pts, coronary angiography in 5 pts, history of CABG in 1 pt & echocardiographic evidence of regional wall motion abnormalities in all pts. Ten pts received TMZ (9 M, 1 F, mean age 56±7.2) whereas a control group of 11 pts (10 M, 1 F, mean age 59.4±8.9) received only conventional treatment without TMZ. Following clinical evaluation, all pts were subjected to resting ECG & 2D echocardiography. TMZ was received at a dose of 20 mg tid, by group 1 pts. Low dose dobutamine stress echocardiography (DSE) was performed on admission & after 60 days in both groups. DSE was done under continuous ECG monitoring, dobutmaine was infused at an incremental regimen of 5 mic/Kg/min every 3 minutes until a maximum dose of 20 mic/Kg/min. Beside measurements of HR & BP., Echo parameters as LVEDD, LVESD, FS% EF%, regional wall motion score index (RWMIS) were taken at rest & after DSE, both before & after 60 days of TMZ treatment.

Compared to control group, TMZ group showed a significantly greater improvement in the FS% (19.0±2.7 to 22.6±3.6 vs 18.9±3.4 to 19.4±2.9; P value < 0.01) and EF% (38.7±4.9 to 45±6.4 vs 38.5±5.7 to 39.0±4.3, P value < 0.01), with significantly greater reduction of RWSI (1.9±0.4 to 1.6±0.3 vs 1.9±0.4 to 2.1±0.2, P value< 0.01). Following DSE, echo parameters again exhibited a significant improvement. Thus compared to measurements before therapy, TMZ shows significantly greater increase FS% (24.1±4.2 to 26.8±4.1 vs 20.9±4.2 to 22.8±2.7, P value: 0.019) & EF% (47.5±7.1 to 52.1±7.1 vs 40.5±7.6 to 42.9±6.1; P value: 0.014), with significant reduction of RWSI (1.7±0.3 to 1.4±0.2 vs 1.8±0.3 to 1.7±0.4, P value< 0.01). Thus compared to control group TMZ treated group exhibited significantly % improvement in terms FS% (19% vs 2%, P value< 0.01), EF% (16.2% vs 1.2%, P value< 0.01). & RWSI (15.7% vs 9.5%, P value< 0.01).

Conclusion: Significant improvement in LV systolic function was shown at rest and by DSE following treatment by TMZ. Through inhibiting fatty acid oxidation and enhancing normal metabolic pathway, TMZ seems to be of particular benefit in that subset of IHD who have concomitant DM with its adverse effects on cardiac metabolism. TMZ may serve as an adjuvant treatment for diabetic pts with IHD to halt the deterioration in the LV systolic function.

Key Words: Trimetazidine, Cardiomyopathy, Ventricular function

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