بسم الله الرحمن الرحيم

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تم عمل المسح الضوئي لهذة الرسالة بواسطة / حسام الدين محمد مغربي

بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى مسئولية عن محتوى هذه الرسالة.

ملاحظات:

- بالرسالة صفحات لم ترد بالأصل
- بعض الصفحات الأصلية تالفة
- بالرسالة صفحات قد تكون مكررة
- بالرسالة صفحات قد يكون بها خطأ ترقيم

Myocardial Perfusion Imaging and Functional Assessment for The Efficacy of Rehabilitation Program Post Myocardial Infarction

Thesis

Submitted in Partial Fulfillment for

Doctoral Degree in Physical Therapy

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بسم الله الرحمن الرحيم

قالوا سبحانك لا علم لنا إلا ما علمتنا
إنك أنت العليم الحكيم

صدق الله العظيم
البقرة (٣٢)

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Myocardial perfusion imaging and functional assessment for the efficacy of rehabilitation program post myocardial infarction

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The effect of cardiac rehabilitation on patients in the recovery stage within 2 weeks after the first attack of acute myocardial infarction were assessed in this study. A total of 16 pts with mean age 52 yrs. Admitted to the Critical Care Department, Cairo University. All pts subjected to clinical, laboratory investigations and myocardial perfusion imaging prior and post the intervention of cardiac rehabilitation that included gradual treadmill exercises for 10 weeks with frequency 3 sessions a week. The results of the study revealed the ability of the cardiac rehabilitation to improve the myocardial perfusion and exercise tolerance in our patients even in pts with anterior MI over the age of 50 years.

Keywords: Acute myocardial infarction – myocardial perfusion – cardiac rehabilitation.

Abstract

Cardiac rehabilitation is currently recommended for patients post myocardial infarction; however, the effect of regular exercise training on the patients in the recovery stage within 2 weeks after the first attack of acute myocardial infarction was assessed in this study.

A total of 16 pts (15 male and 1 female) with mean age (52.1±8) yrs admitted to the Critical Care Department, Cairo University with first attack of uncomplicated AMI were studied. All patients subjected to clinical, laboratory investigations and myocardial perfusion imaging prior and post the intervention of cardiac rehabilitation program that incldued graduated treadmill exercise training for 10 weeks with frequency 3 sessions a week. The results of this study revealed the ability of the cardiac rehabilitation program to improve the myocardial perfusion reflected as significant decrease in mean stress score in post study (15.2±8.0 vs 20.6±8.8), rest score (10.5±6.9 vs 12.4±6.5), and difference score (4.7±3.2 vs 8.2±4.2) compared with pre study value, LVEF as significant higher value post study (55.5±11.4 vs 50.6±11.7) compared to pre study value, and exercise tolerance in our patients even in pts with anterior MI over the age of 50 years as there was significant higher value of exercise time post study (9.5±2.2 vs 7.7±2.3) and lower value of resting HR (79.7±11.5 vs 86.9±11.3) compared with the pre study value.

Conclusion : It was confirmed that cardiac rehabilitation in patients post AMI is effective in adjunct to medical treatment for those patients without any further adverse reaction or myocardial damage.

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AMI:	Acute myocardial infarction
BRS:	Baro reflex sensitivity
CAD:	Coronary artery disease
CRP:	C-reactive protein
DBP:	Diastolic blood pressure
DM:	Diabetes mellitus
EDV:	End diastolic volume
EF:	Ejection fraction
ESV:	End systolic volume
FH:	Family history
HDL:	High density lipoprotein
HL:	Hyperlipidemia
HR:	Heart rate
HRV:	Heart rate variability
HTN:	Hypertension
LDL:	Low density lipoprotein
LVH:	Left ventricular hypertrophy
MI:	Myocardial infarction
MPI:	Myocardial perfusion imaging
NO:	Nitric oxide
SBP:	Systolic blood pressure
SPECT:	Single photon emission computed tomography