Relationship BetweenCoronary Risk Factors, C-Reactive Protein, Insulin Growth Factor and Bone Mineral Density Among Frail Elderly.

Thesis submitted for partial fulfilment
Of MD degree in Geriatric Medicine

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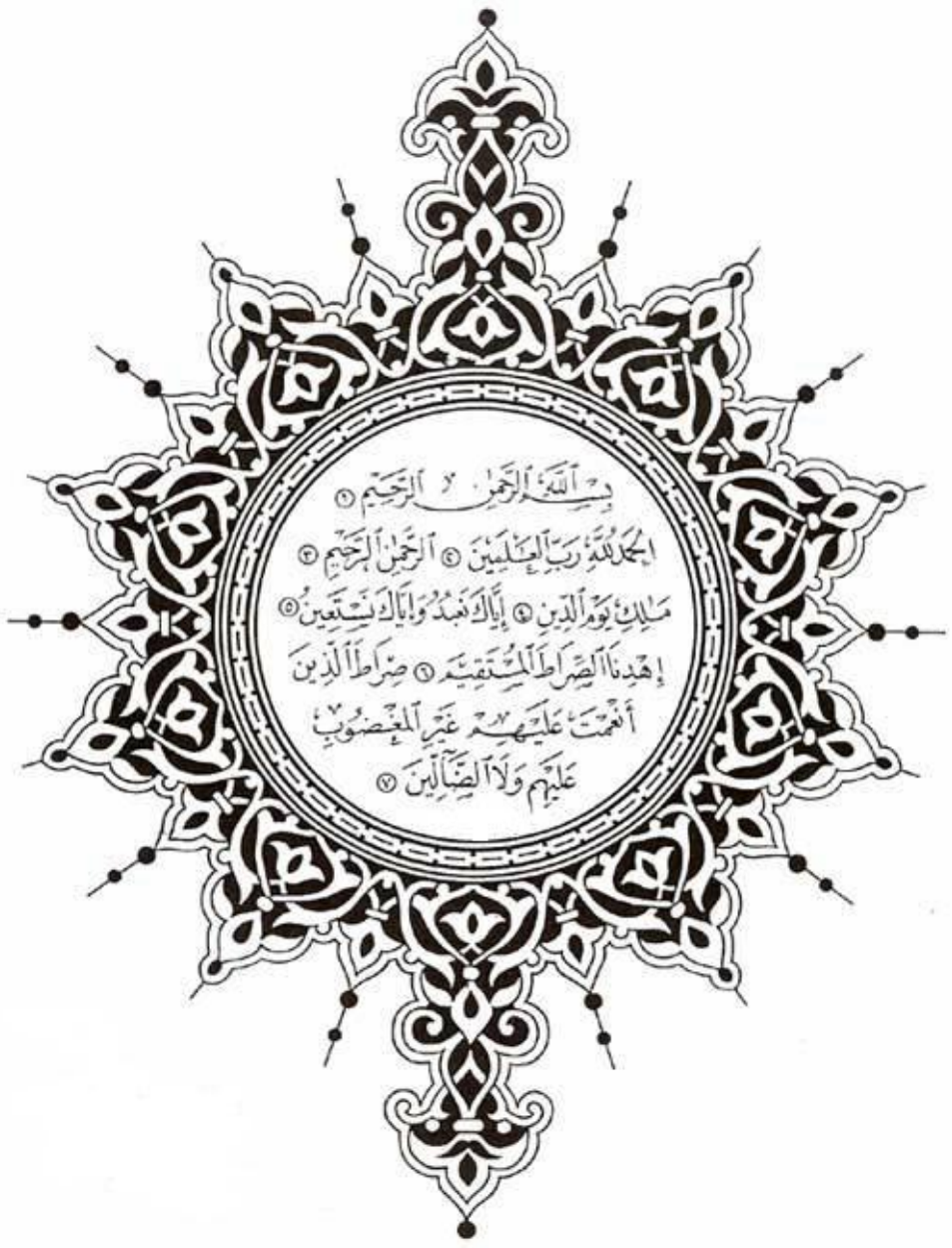
2013


بِسْمِ اللَّهِ الرَّحْمَٰنِ الرَّحِيمِ ①
الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ ② الرَّحْمَٰنِ الرَّحِيمِ ③
مَالِكِ يَوْمِ الدِّينِ ④ إِيَّاكَ نَعْبُدُ وَإِيَّاكَ نَسْتَعِينُ ⑤
اهْدِنَا الصِّرَاطَ الْمُسْتَقِيمَ ⑥ صِرَاطَ الَّذِينَ
أَنْعَمْتَ عَلَيْهِمْ غَيْرِ الْمَغْضُوبِ
عَلَيْهِمْ وَلَا الضَّالِّينَ ⑦

Acknowledgements

First and for most, thanks to **Allah** "The Most Merciful"

In all gratitude, I extend my thanks to **Prof.Moatassem Salah Amer,** professor of Geriatric and Internal medicine, Ain Shams University, for honoring me with the supervision of this thesis. His help, guide and valuable advice were a great encouragement through out the work.

Particular thanks to **Dr. RandaReda Abdel Wahab**, Professor of Clinical Pathology, Ain Shams University, for her help and valuable advice.

I would like to thank **Dr. Tamer Mohamed Farid,,**Assistant professor of Geriatric Medicine, Ain Shams University for his sincere and kind help.

I am also sincerely thankful to **Dr. Hoda Mohamed Farid**,, Lecturer of Geriatric Medicine, Ain Shams University, for her support and assistance.

This work is dedicated to my family for their loving support.

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List of abbreviations

- **ACE** Angiotensin-converting enzyme
- **ADL** Activities of Daily Living
- **BMD** Bone mineral density
- **BMI** Body Mass Index
- **CES-D(22)** Center for Epidemiological Studies-Depression scale
- **HBA1C** Glycatedhaemoglobin
- **CHF** Congestive Heart Failure,
- **CHOL** Cholesterol
- **CHS** The Cardiovascular Health Study
- **CKD** Chronic Kidney disease,
- **CLD** Chronic Liver Disease,
- **COPD** Chronic Obstructive Pulmonary Disease
- **CRP** C-reactive protein
- **CSHA** Canadian Study of Health and Aging
- **CVD** Cardiovascular disease
- **DHEA** Dehydroepiandrosterone
- **DM** Diabetes Mellitus,
- **DXA** Dual Energy X-ray absorptiometry
- **ECG** Electro- cardiogram

- **GDS** Geriatric Depression Scale
- **GH** Growth hormone
- **HDL** High density lipoprotein
- **HTN** Hypertension,
- **IADL** Instrumental Activities of Daily Living
- **IGF-I** Insulin-like growth factor I
- **IHD** Ischemic Heart Disease
- **IL-6** Interleukin-6
- **LDL** Low-density lipoprotein
- **MMSE** Mini Mental Status Examination
- **MRI** Magnetic resonance imaging
- **OA** Osteoarthritis
- **SD** Standard Deviation
- **SOF** Study of Osteoporotic Fractures Index
- **TG** Triglycerides
- **TNF- α** Tumor necrosis factor5α
- **VLDL** Very low-density lipoprotein

Introduction and Aim of the Work

Frailty

Frailty & Coronary risk factors

Frailty and Osteoporosis

Frailty and Inflammatory markers