

**Relationship Between Coronary 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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## **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-  $\alpha$**  Tumor necrosis factor $5\alpha$
- **VLDL** Very low-density lipoprotein



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# Introduction and Aim of the Work

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Frailty

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# Frailty & Coronary risk factors

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# Frailty and Osteoporosis

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# Frailty and Inflammatory markers

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