recent well designed individually randomised RCTs and meta-analyses have been disappointing, probably related to compliance issues.

Models of Care: Several models of care have been developed over the last two decades. These include the fracture liaison service and primary care identification of fracture risk. Close working between geriatricians, orthopaedic surgeons and anaesthetists and timely and appropriate care of hip fracture patients have improved outcomes and the sub-speciality of ortho-geriatrics is rapidly growing worldwide.

Predictors of abnormal hand grip strength among Egyptian elderly

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Introduction: Hand grip strength (HGS) is gaining attention and interest of researchers and clinicians, including geriatricians, its measurement is available, cheap, useful measure for muscle strength. Although several studies have focused on the correlation between grip strength and stature, or grip strength and body weight, the covariance effect among sex, BMI, height, and weight has rarely been analyzed statistically 5, 6, 7.

Aim of this study: To find the predictors of abnormal hand grip strength; measured by using Jamar hand held dynamometer, in the community-dwelling Egyptian senior citizens.

Sample and Methods: The study was approved by the ethical committee of the Faculty of Medicine, Ain Shams University, Cairo, Egypt. This cross sectional study included randomly selected 200 elderly (60 years old or above), of both sexes, attending outpatient clinic of geriatric medicine department and outpatient clinic of internal medicine department in Ain Shams University hospital. Before participation a written informed consent was taken from each participant. Then Comprehensive Geriatric assessment was done including assessment of health-related quality of life using the short form 12 health survey

Exclusion criteria: refusal to participate in the study, restriction of movements of upper limb, functional decline due to any history of inflammatory joint diseases of upper extremity, functional decline due to any neurological disorder that affects upper limb activity, any injury to upper extremity, body oedema, depression or cognitive impairment. hand grip strength was measured using the Jamar hand held dynamometer

Statistical methods: IBM SPSS statistics (V. 25.0, IBM Corp., USA, 2017) was used for data analysis. Data were expressed as Mean ± SD for quantitative parametric measures in addition to both number and percentage for categorized data.

The following tests were done:
1. Comparison between two independent mean groups for parametric data using Student t test. 2. Chi-square test to study the association between each 2 variables or comparison between 2 independent groups as regards the categorized data. The probability of error at 0.05 was considered significant, while at 0.01 and 0.001 are highly significant. 3. Diagnostic validity test: It includes: a. The diagnostic sensitivity. b. The diagnostic specificity. c. The predictive value for a +ve test. d. The predictive value for a -ve test. e. The efficacy or the diagnostic accuracy of the test.

The ROC was constructed to obtain the most sensitive and specific cutoff for each variable, AUC can also be calculated.

4. Logistic Multi-Regression analysis was used to search for a panel (independent parameters) that can predict the target parameter (dependent variable).

Results: Study sample ages range from sixty years old to ninety five years old with mean age is 69 ± SD 7.1 years. One hundred and seventeen females (58.5%) and eighty three males (41.3%). Chi-square test proved that abnormal findings for grip strength was significantly higher among females than that of males (67.7% Vs 32.3%). The Student t test proved that both height and weight were decreased significantly among subjects with abnormal hand grip strength in comparison to those normal, while BMI showed non-significant difference.

Stepwise logistic multi-regression analysis was used to study the actual predictors for grip strength using several models searching for the most sensitive predictors. Finally, the results proved that is no actual relation between gender and abnormality in hand grip strength but only height and general health that grip strength abnormality depends. The best prediction for abnormal hand grip strength found to be general health at 25 combined with height 178 cm (sensitivity 100% and specificity 87.5%); as the values of general health and height decrease than those cutoff points the hand grip strength decrease and vice versa.

Applications: Physicians can predict abnormal HGS in Egyptian elderly if general health is less than 25 (as measured by SF-12 health survey) in person with height less than 178 cm.

Prevalence of diabetic nephropathy among aged with type 2 diabetes mellitus and its association with cardiovascular diseases

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Background: Controversy exists regarding the association between reduced glomerular filtration rate (GFR) and stroke, as one of the cardiovascular end points.

Aim: To study the prevalence of diabetic nephropathy among elderly with type 2 diabetes mellitus and the association between impaired GFR and/or proteinuria and cardiovascular diseases especially stroke.

Methods: This study was an observational cross sectional study. Patients known to have type 2 diabetes mellitus were recruited from outpatient clinics and inpatient departments, over 1 year period. Patients were excluded if they had known or suspected immune disorders, systemic infections, neoplasia or cystic diseases. Patients were not enrolled during acute illness. The collected data included estimated glomerular filtration rate (eGFR) and urinary protein creatinine ratio. History of prior acute myocardial ischemia, stroke or peripheral vascular disease was reported. Framingham 10 year coronary risk prediction was calculated. The association between proteinuria and/or decreased eGFR and cardiovascular diseases, especially stroke, was studied.