different performances in TUG and Nintendo Wii parameters between two groups. There was a significant statistical difference in TUG, Wii single leg balance seconds, Wii single leg balance performance percentage and Wii Fit Age between hypertensive and normotensive groups ( p < 0.05).

**Conclusion:** Not having a history of falling does not guarantee the good balance among hypertensive geriatrics. For the elderly people without a history of falling but presence of hypertension, attention to balance performance and physical activities is suggested.

#### P-447

## Lipid peroxidation in elderly patients with rheumatoid arthritis (RA)

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**Objectives:** Inflammatory rheumatic disorders such as rheumatoid arthritis, diabetes and cardiovascular diseases are characterized by an important oxidative stress. The oxidative stress is a marker of inflammation and mutagenesis that contribute to the cardio-vascular diseases. Lipid peroxidation is a marker of oxidative damages in lipids and it is implicated in the development of atherosclerosis. We aim to evaluate the prevalence of oxidative stress in elderly with RA based on lipid peroxidation: dosage of malondialdheyde MDA and conjugated diene CD (in plasma and erythrocyte).

**Methods:** Our study included 80 patients  $(53,19 \pm 10,9 \text{ years})$  with RA with a period of evolution of the disease  $11,39 \pm 8,16$  years. They were recruited from the Rheumatology and Internal Medicine department of F. Bourguiba Hospital in Monastir (Tunisia). We divided these patients into two groups depending on the age: G 1 (age <60, n = 55), and G 2 (age  $\geq$ 60, n = 25).

**Results:** The levels of MDA and CD were achieved in the Research Laboratory (LR12ES05 Faculty of Medicine in Monastir (Tunisia).

**Results:** The level of MDA in plasma is higher in G 2 than in G 1  $(0.97 \pm 0.25 \text{ vs } 0.84 \pm 0.21; p = 0.43)$  while the level of MDA in erythrocytes is not significant between the two G. The levels of CD in plasma and erythrocytes are higher in G 2 respectively (162,98  $\pm$  38,39 vs 135,28  $\pm$  46,59; p = 0,008; 262,66  $\pm$  55,52 vs 209,40  $\pm$  73,05; p = 0,001). Conclusion: The levels of MDA and CD in plasma and erythrocytes are higher in elderly.

**Conclusion:** We can conclude that there is a significant association between the oxidative stress and aging of patient with RA.

### P-448

# The role of the ortho-geriatrician in the management of the patient with fracture

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**Objectives:** The management of fragility, fractures requires a collaborative multi-disciplinary approach to care optimal patient outcomes. The Orthogeriatric Unit has been shown to be one of the most beneficial units. It is important to evaluate the model of care admission to orthogeriatric units improves clinical outcomes for patients with hip fracture, patient with hip fracture, due to their characteristics, require a specific care. The aim of this study were to compare the patient profile at orthogeriatric unit and classic geriatric unit

**Methods:** This is a partially concurrent prospective study, taking place in a large urban academic hospital GHdC in Belgium. The participants were 87 consecutive elderly people, admitted directly to a geriatric-based orthogeriatric ward (ORTG). 107 patients were admitted to the geriatric unit (GG).

**Results:** The two groups were similar, yet ORTG patients were somewhat older (85.2 vs 83.8 years, p < 0.07), were cognitively better preserved (MMSE: 20.6 vs 17.4, p < 0.01), have a lower ADL

score (12.2 vs 14.2, p < 0.02) and Vit D level (17.9 vs 21.2 ng/mL p < 0.001). Patients of the ORTG have more confusion compared to GG (55% vs 32%, p < 0.001). The MNA score, Tinetti and The length of hospital stay were similar for the two groups.

**Conclusion:** This study contributes to the increasing body of evidence for best practice in the management of elderly patients after fracture in the orthogeriatric unit to benefit from multidisciplinary expertise. Admission to orthogeriatric units improves clinical outcomes for older patients with a geriatric profile.

#### P-449

## 30 day and 180 day readmission following geriatric in-patient rehabilitation

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**Introduction:** Recently hospitalized patients are recovering from acute illness, alongside experiencing a period of generalized risk of adverse health events. This study used routinely collected data, to characterize patients readmitted to hospital after rehabilitation at a geriatric rehabilitation unit within 30-days and 180-days of discharge. **Methods:** Admissions for in-patient rehabilitation over a 10-year period were identified at one site. Data were available regarding demographics, comorbid disease, admission and discharge Barthel scores, length of hospital stay (LOS), and number of medications on discharge. Multivariate analyses were performed to examine differences between readmission groups and those not readmitted.

**Results:** A total of 3.984 patients were included in the analysis. After adjustment for age, gender and comorbidities, for patients readmitted within 30-days, age (0.979 [0.960-0.998] p = 0.029), LOS (0.996[0.992-0.999] p = 0.018) and congestive cardiac failure (CCF) (1.621 [1.065-2.468] p=0.024) were statistically significant. For patients readmitted within 180-days, age (0.987 [0.979-0.996] p = 0.003), gender (0.809 [0.715–0.916] p = 0.001), LOS (0.996 [0.995–0.998] p = <0.001), previous myocardial infarction (MI) (1.265 [1.077–1.485 p = 0.004), CCF (1.551 [1.278–1.884] p = <0.001), diagnosis of cancer (1.251 [1.053-1.487] p = 0.011), chronic obstructive pulmonary disease (COPD) (1.246 [1.062-1.468] p = 0.007) and medication count on discharge (1.027 [1.008-1.047] p = 0.005) were statistically significant. **Conclusion:** CCF, younger age and shorter LOS were associated with readmission within 30-days. Younger age, males, shorter LOS, previous MI, CCF, diagnosis of cancer, COPD and medication count on discharge were associated with readmission within 180-days. Interventions focused upon coordinating discharges for patients with the highest risk of readmission will be the focus of future research.

## P-450

# Geriatric assessment data on elderly men and women living in the society the relation with gender

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**Aim:** This paper aims at investigating geriatric assessment data and its association with gender in the elderly men and women assessed within the scope of geriatric study in Fatih District/Istanbul Province. **Tools and methods:** The study recruited elderly cases between the age of 60 and 101, who live in society. The questionnaire covered KATZ/Daily-Life-Activity-Scale (DLA) and LAWTON-BRODY-Instrumental-Daily-Life-Activity-Scale (IDLA) for the functional capacity measurement, Q5D-life-quality survey for life-quality-measurement, a mini-cog test for cognitive status, GDS-SF for depression, a FRAIL survey for vulnerability, a Romberg test and a postural instability test for balance and walking.

**Findings:** The study recruited 204 elderly cases (94 men, 110 women). Mean age: The mean age was  $75.4 \pm 7.3$  years. Demographics, functionality, geriatric syndrome data of the study population and mutual distributions among genders are presented. Out of our study

population, elderly women's numbers of chronic diseases and medications, GDS-SF score, EQ-5D score, fear of falling, urinary incontinence, VAS score, chronic pain complaints and FRAIL score were higher while their educational level, instrumental daily life activity score and subjective health status score were lower. No significant difference was observed between two genders in terms of age, basic DLA score, existing dementia, HT, DM, HL diagnoses, subjective health status score, rates of falling within the last 1 year, fecal incontinence, Romber maneuver, need for assistance in ambulation, and cognitive disorder presence assessed by a mini-cog test. The postural instability was more common for the elderly women whereas it was within the limit of significance (p = 0.07).

**Conclusion:** The prevalence of geriatric syndromes was found higher in the elderly women living in society than in men. The findings of our study suggest that geriatric assessment is likely to be much more beneficial in women.

Keywords: geriatric assessment gender.

# P-451 Fatih Geriatrics Trial: how often is sarcopenia, low muscle mass and muscular performance decrease for the elderly people living in society?

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**Objective:** In this abstract, it is aimed to determine the prevalence of sarcopenia and its components in the elderly people who are evaluated by Fatih/Istanbul Province geriatric survey research.

**Methods:** In the study, the sample changes from 63 to 101 years old people. Muscle mass is measured by bio impedance analyze (TANITA-BC532) and is evaluated by Baumgartner Index (skeletal muscle kg/length2). According to our national data, low muscle mass (the average of adult-2SD) and muscle power threshold are determined for men and women: <9.2 kg/m², 7.4 kg/m² and <32 kg, <22 kg respectively. Also, Class 1 low muscle mass level is determined as 10,1 and 8,2 kg/m². The definition of sarcopenia is defined as low muscle mass (SMMI) and reduction of muscle function (OYH or strength of muscle) by definition of EWGSOP. Additionally, calf girth is noted. According to our national references, the low calf girth is determined as being the diameter of calf girth lower than 33 cm.

**Table 1**Results of the research population by gender

	Men (n = 94)	Women (n = 110)	Total (n = 204)	p
Age	74,7 ± 6,6	76 ± 7,8	75,4 ± 7.3	0,19
Height	167,1 ± 7,4	$153,2 \pm 7,5$	159,5 ± 10,2	<0,001
Weight	$75,9 \pm 14,1$	$73,1 \pm 16,5$	$74,3 \pm 15,7$	0,2
BMI	$27,1 \pm 4,5$	$31,3 \pm 6,9$	$29,4 \pm 6,3$	<0,001
Falling (last 1 year)	25,5%	30,3%	28,1%	0,47
Fear of falling	18,1%	45%	32,5%	<0,001
Inability to walk without help	19,1%	23,6%	21,6%	0,25
Strength of hand grip	$32,1 \pm 8,8$	$19,8 \pm 5,5$	$25,6 \pm 9,5$	<0,001
Dynapenia	43.6%	58.5%	51,5%	0,036
				(men <32 kg, women <22 kg)
Calf Girth	$36,1 \pm 4,8$	$37,8 \pm 6,1$	$37 \pm 5,6$	0,03
Low calf girth	19.1%	12.8%	15.8%	0.24
OYH	$1,09 \pm 0,40$	$0,98 \pm 0,34$	$1,03 \pm 0,38$	0,051
Low OYH	21.3%	29,8%	25,6%	0,21
Muscle mass (kg)	$52 \pm 7,8$	$41,6 \pm 8,7$	$46,4 \pm 9,8$	<0,001
SMM	$29,4 \pm 4,4$	$23,5 \pm 4,9$	$26,3 \pm 5,5$	<0,001
Low SSMI (Baumgartner)	17.9%	3%	9,8%	0,001
Sarcopenia Baumgartner	8.2%	2.9%	5.3%	0,11

**Results:** 204 cases (94 men, 110 women) were included in the research. Median age was  $74,5 \pm 7,3$  years. The characteristics and their

distributions by gender are summarized in the Table 1. The prevalence of sarcopenia and its components are by order: sarcopenia 5.3%, low muscle mass 9.8%, dynapenia 51.5%, low walking speed 25.6%. Low calf girth-an indirect indicator of low muscle mass-was observed in the 15.8% of the cases.

**Conclusion:** Our results of study show that the sarcopenia prevalence of elderly people in our society is low which is similar in other population; however, dynapenia and the low level of walking speed are very common problems.

#### P-452

Long-term home-based physiotherapy for older people with signs of frailty or consequent to a hip fracture operation – Design of RCT (NCT02305433)

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**Objectives:** There is increasing need to develop rehabilitation models to postpone older people's disabilities and institutional care. One alternative is home-based rehabilitation with emphasis on functional-based exercises. Our aim is to study home-based physiotherapy for 12 months with 12 months' follow-up in older people either with signs of frailty or consequent to a hip fracture operation.

**Methods:** Three hundred frail (>65 y) persons and 300 persons with hip fracture (>60 y) will be recruited in Eksote District, Finland (population 131,000). Both groups are randomized separately to a physiotherapy (60 minutes 2 times weekly) arm, and a usual care arm. Assessments, including modified Fried's frailty criteria, SPPB, FIM, IADL, 15D, MNA, FES-I, MMSE, GDS-15 and SPS, are performed by an assessor-physiotherapist at the participant's home at baseline, 3, 6 and 12 months. The primary outcome is duration of living at home at 24 months (a difference of six months between the groups is hypothesized). Secondary outcomes are physical functioning, frailty status, health-related quality-of-life, use and costs of health and social services, falls, and mortality.

**Results:** Recruitment will continue until the end of 2016. By May 2016, 277 frail persons and 46 persons with hip fracture have been randomized. Hundred persons (90 and 10, respectively) have completed 12-month assessment, and 33 persons have discontinued.

**Conclusions:** Our trial will provide new knowledge on how to implement intensive long-term home-based physiotherapy and whether it improves physical functioning of persons at risk for disabilities, to postpone institutional care. – Supported by Social Insurance Institution.

## P-453 Outcomes in an orthogeriatrics Portuguese unit

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**Background:** Hip fracture is common in older adults and is associated with high morbidity, mortality and a common cause of long hospital stay in the elderly. A pilot orthogeriatric unit was established in a Portuguese Tertiary Hospital in October 2015 to ascertain if such a unit would improve patient outcomes. The aim of this study is to evaluate the efficiency of a multidisciplinary team.

**Methods:** A retrospective cohort study was performed between October 2015 and April 2016. We assessed hospital length of stay and time to perform surgery, the degree of prior functional dependence in admission and discharge of the unit, comorbidities, complications and mortality.

**Results:** Of 110 elderly had median age 83.5 (max 100 years and minimum 65 years); 84.5% were women. The hospital stay was 8.1 days and the average time to perform surgery of 2.88 days. The degree of functionality prior to event was 40.9% Katz A and 73.6% had