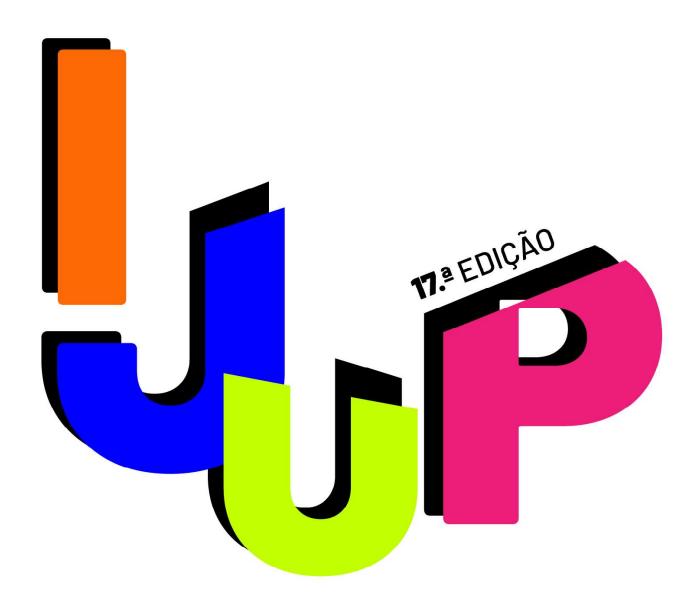
BOOK OF ABSTRACTS



Organização







YOUNG RESEARCHERS MEETING







TÍTULO | *TITLE*

Livro de Resumos do 17.º Encontro de Investigação Jovem da U.Porto / *Book of Abstracts Young Researchers Meeting of U.Porto*

Universidade do Porto

Vice-Reitor para a investigação e Inovação

Professor Doutor Pedro Rodrigues

ijup@reit.up.pt

ISBN

978-989-746-378-5

Design

Serviço de Comunicação e Imagem da U.Porto

21947 | Sarcopenia in an Internal Medicine department and the relationship with cognitive function

<u>Francisca Lino</u>¹; Catarina M. Matos¹; Margarida Dias²; Diva Melim²; Bruno Oliveira¹; Sílvia Pinhão^{1,2}; Jorge Almeida²

Faculty of Nutrition and Food Sciences, University of Porto¹; São João hospital and University Center²

Background & Aim: Sarcopenia, a skeletal muscle disorder has personal and socioeconomic impact⁽¹⁾. Cognitive impairment (CI) is the decline of 1 or more cognitive domains⁽²⁾. We aimed to study the possible relation between the prevalence of sarcopenia and cognitive function in the internal medicine department. Methods: We studied sarcopenia by handgrip circumference(MAMC)⁽³⁾ strength(HGS)(Gripwise®), mid-arm muscle and calfcircumference(CC); CI by Mini-Mental-State-Examination(MMSE)(4). Weight, height, Body Mass Index(BMI)⁽⁵⁾, fat and muscle mass using skinfolds(Lipowise®) were assessed. **Results:**70 women and 92 men admitted in internal medicine service were included, on average aged 81 and 76, BMI 27.4 and 25.1kg/m², body fat(BF) 33.9 and 22.3%, MAMC 19.2 and 21.9cm, CC 31.9 and 32.2cm and HGS 8.5 and 18.3kgF, respectively. 23 and 25 points were obtained on MMSE for women and men, respectively. 91.4%, 44.4%, 36.6% had suggestive values of sarcopenia using HGS, MAMC and CC, respectively. By MMSE, 36.4% had CI. A positive and statistically significant correlation was found between HGS(rs= 0.412;p<0.001), MAMC(rs= 0.328;p<0.001), CC(rs=0.381;p<0.001) and cognitive function. There was also found that BF was positively associated with MMSE score, however it was not significant (rs=0.055; p=0.484). Conclusions: We conclude that patients with a better nutritional status had better cognitive function since they had higher MMSE scores.

Keywords: Sarcopenia, Cognitive Function, Nutritional Status.

References:

- [1] Cruz-Jentoft AJ, Bahat G, Bauer J, Boirie Y, Bruyère O, Cederholm T, et al. Sarcopenia: revised European consensus on definition and diagnosis. Age and ageing. 2019; 48(1):16-31.
- [2] Scisciola L, Fontanella RA, Surina, Cataldo V, Paolisso G, Barbieri M. Sarcopenia and cognitive function: role of myokines in muscle brain cross-talk. Life. 2021; 11(2):173.
- [3] Landi F, Liperoti R, Russo A, Giovannini S, Tosato M, Capoluongo E, et al. Sarcopenia as a risk factor for falls in elderly individuals: results from the ilSIRENTE study. Clinical nutrition. 2012; 31(5):652-58.

- [4] Folstein MF, Folstein SE, McHugh PR. "Mini-mental state": a practical method for grading the cognitive state of patients for the clinician. Journal of psychiatric research. 1975; 12(3):189-98.
- [5] Organization WH. Body mass index. Disponível em: https://www.euro.who.int/en/health-topics/disease-prevention/nutrition/a-healthy-lifestyle/body-mass-index-bmi.