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

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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 strength(HGS)(Gripwise®), mid-arm muscle circumference(MAMC)⁽³⁾ and calf-circumference(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.

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