ORAL PRESENTATION
OP7

Association between Calf Circumference and Frailty among Older People Attending Geriatric Clinic at Hospital Kuala Lumpur

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ABSTRACT

Background and Objectives: Frailty is a major risk factor of hospitalization among older people. Assessing frailty level is challenging especially when patients are acutely ill. Therefore, practical assessment may be recommended as a proxy for frailty screening. This study aimed to evaluate whether calf circumference (CC) differ among different levels of frailty. **Methods:** This cross-sectional study recruited 233 patients from the geriatric clinic at Hospital Kuala Lumpur, aged ≥ 60 years (mean±SD 69.2±6.4 years). Calf circumference as measured at the greatest bulk of the calf in sitting and categorized into 2 groups according to gender (Male: ≥34cm vs <34cm, Female: ≥31cm vs<31cm) using the AWGS 2019 cut-off. Frailty was categorized into robust, prefrail and frail. **Results:** 39 (37%) female had CC below 31cm while 55 (43%) males had CC below 34cm. Robust, prefrail and frail status represented by 19 (18.1%), 24 (22.9%) and 62 (59%) in females, 21 (16.4%), 30 (23.4%) and 77 (60.2%) in males, respectively. There is a significant difference in mean CC among frailty status in females (χ^2=29.86, p<0.001) and males (χ^2=58.08, p<0.001). Crosstabs analysis revealed CC categories were associated with frailty status in both females and males (p<0.000). **Conclusion:** CC using the cut-off recommended by AWGS 2019 is associated with frailty status. Therefore, CC may be used for screening patients who may not be able to perform physical functional testing such as sit to stand.

Keywords: Frailty, Older adult, Calf Circumference, Screening,

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