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DIAGNOSTIC ACCURACY OF ESPEN DIAGNOSTIC CRITERIA FOR MALNUTRITION IN SELECTED CLINICAL POPULATIONS

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Rationale: We aimed to assess diagnostic accuracy of ESPEN's Diagnostic Criteria for malnutrition (EDC), as compared to the Patient-Generated Subjective Global Assessment (PG-SGA) in selected clinical populations.

Methods: In two hospitals, in 174 patients (67.5±10.3 yrs; COPD: n=116; colon/rectum cancer: n=21; orthopedic: n=37) malnutrition was assessed by EDC and PG-SGA. According to EDC, malnutrition was defined as having at least one of the following criteria: 1) BMI <18.5 kg/m^2; 2) combination of unintentional weight loss (>10% of habitual weight indefinite of time, or >5% over 3 months) and low BMI (<20 or <22 kg/m^2 in subjects younger and older than 70 yrs, respectively) and/or a low fat-free mass index (FFMI) by bio-electrical impedance (<15 [female] and <17 kg/m^2 [male]). As reference, malnutrition was defined as PG-SGA Stage B (moderately/suspected malnutrition) or Stage C (severely malnourished). Diagnostic accuracy was assessed by sensitivity, specificity, positive and negative predictive value, and ROC curve.

Results: According to EDC and PG-SGA, 6.9% and 31% were malnourished, respectively. For COPD, colon/rectum cancer, and orthopedic patients, prevalence was 9.5% and 39.7%, 4.8% and 19%, and 0% and 10.8% respectively. Overall sensitivity, specificity, positive and negative predictive value were 0.15, 0.97, 0.85 and 0.03, respectively. The area under the ROC curve (AUC) was 0.56 (p=0.23) for the total population. For COPD, colon/rectum cancer, and orthopedic patients AUC was 0.55 (p=0.39), 0.63 (p=0.45), and 0.50 (p=1.00), respectively.

Conclusion: In COPD, rectum-/colon cancer, and orthopedic patients, diagnostic accuracy of EDC as compared to the PG-SGA is low, especially sensitivity and negative predictive value. Consequently, using EDC in these populations is likely to result in underrecognition of malnutrition, which may hinder timely and adequate treatment of malnutrition.

Disclosure of Interest: P. Dewansingh: None Declared, L. ter Beek: None Declared, M. Euwes: None Declared, G. van der Sluis: None Declared, F. Ottery Other: Developer of the PG-SGA, co-developer of the PG-SGA based Pt-Global app, C. van der Schans: None Declared, H. Jager-Wittenaar Other: Co-developer of the PG-SGA based Pt-Global app

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