The Association of Empirical Dietary Inflammatory Index with Musculoskeletal Pains in Elderlies

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Abstract : Background: Musculoskeletal pain is one of the most prevalent symptoms in elderly age. Nutrition and diet are considered important underlying factors that could affect chronic musculoskeletal pain. The purpose of this study was to identify the relationship between empirical dietary inflammatory patterns (EDII) and musculoskeletal pain. Method: In this cross-sectional study, 213 elderly individuals were selected from several health centers. The usual dietary intake was evaluated by a valid and reliable 147-items food frequency questionnaire (FFQ). To measure the intensity of pain, Visual Analogue Scale (VAS) was used. Multiple Linear Regression was applied to assess the association between EDII and musculoskeletal pain. Results: The results of multiple linear regression analysis indicate that a higher EDII score was associated with higher musculoskeletal pain (β = 0.21: 95% CI: 0.24-1.87: P= 0.003). These results stayed significant even after adjusting for covariates such as sex, marital status, height, family number, sleep, BMI, physical activity duration, waist circumference, protector, and medication use (β = 0.16: 95% CI: 0.11-1.04: P= 0.02). Conclusion: Study findings indicated that higher inflammation of diet might have a direct association with musculoskeletal pains in elderlies. However, further investigations are required to confirm these findings.

Keywords : musculoskeletal pain, empirical dietary inflammatory pattern, elderlies, dietary pattern

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