

Title: Association Between Sarcopenia and Diabetic Peripheral Neuropathy: A Systematic Review and Meta-Analysis.

Author(s): Thapat Wannarong

Affiliation: Department of Neurology, University Hospitals Cleveland Medical Center, Cleveland, OH, USA

"Background/Aims: Previous studies have suggested an association between diabetic peripheral neuropathy (DPN) and sarcopenia, although results from those studies were inconsistent. This systematic review and meta-analysis were conducted to comprehensively investigate this relationship by identifying all available studies and summarizing their results together.

Methods: A systematic review was conducted in MEDLINE and EMBASE database from inception to May 8th, 2020. We identified all cross-sectional studies that investigated the association between DPN and sarcopenia among diabetic patients. Point estimates and standard errors from eligible studies were pooled together using the generic inverse variance method described by DerSimonian and Laird.

Results: Of 2,865 retrieved articles, four studies met the inclusion criteria and were included in the meta-analysis. The pooled analysis found a significant association between sarcopenia and DPN with the pooled odds ratio of 1.58 (95% CI, 1.22 – 2.05; I² 0%).

Conclusions: The current study found a significant association between DPN and sarcopenia among diabetic patients."