

Effect of physical therapy modalities on quality of life of head and neck cancer survivors: A systematic review with meta-analysis

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Abstract

The objective was to describe the effectiveness of different physical therapy modalities to improve Quality of Life (QoL) in Head and Neck Cancer (HNC) survivors. PubMed, Scopus, Web of Science, CINAHL and Cochrane Library were searched for randomized clinical controlled trials published until 30 April 2020. Risk of bias assessment and meta-analysis were conducted using the Cochrane tools. A total of 251 records were retrieved, and 10 met the inclusion criteria. Interventions whose parameters focus on a 12-week exercise programs of aerobic activity (walking) or Progressive Resistance Training (PRT) for the whole body are effective and safe modalities improving QoL in HNC survivors. Electrophysical agents did not show significant results between groups. As for the assessment of methodological quality, 4 of the 10 articles included had a high risk of overall bias. Only five articles provided sufficient information to conduct a meta-analysis for exercise program intervention on QoL, showing a tendency in favor of intervention group, even when the global results did not show statistically significant improvements (pooled Cohen's d 0.15; 95% CI: -0.25 to 0.54; I^2 45.87%; p heterogeneity = 0.10). The present review and meta-analysis identified meaningful benefits of exercise on QoL of HNC survivors; this has been confirmed in a meta-analysis. This review adds evidence supporting exercise interventions on Head and Neck Cancer population whose opportunities for successful recovery after medical treatment are more limited. © 2021 by the authors. Licensee MDPI, Basel, Switzerland.

Author keywords

Cancer survivors; Head and neck neoplasms; Meta-analysis; Physical therapy modalities; Quality of life; Systematic review