Respiratory dysfunction in chronic neck pain patients. A pilot study

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Abstract

The aim of this pilot study was to add weight to a hypothesis according to which patients presenting with chronic neck pain could have a predisposition towards respiratory dysfunction. Twelve patients with chronic neck pain and 12 matched controls participated in this study. Spirometric values, maximal static pressures, forward head posture and functional tests were examined in all subjects. According to the results, chronic neck patients presented with a statistically significant decreased maximal voluntary ventilation (P = 0.042) and respiratory muscle strength (Pimax and Pemax), (P = 0.001 and P = 0.002, respectively). Furthermore, the current study demonstrated a strong association between an increased forward head posture and decreased respiratory muscle strength in neck pateits. The connection of neck pain and respiratory function could be an important consideration in relation to patient assessment, rehabilitation and consumption of pharmacological agents.