

The Relationship of the Craniovertebral Angle with Pain and Activities of Daily Living in Patients with Neck Pain attending the Department of Physiotherapy at Kotelawala Defence University Hospital Sri Lanka

HHH Lakshani¹, TPE Senevirathna^{1#}, MKK Praboda¹, SADCS Senavirathna¹, and JLR Jayalath²

¹Faculty of Allied Health Sciences, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

²Faculty of Medicine, University of Colombo, Colombo, Sri Lanka

#hiruni.lakshanihh@gmail.com

Abstract

Neck pain is one of the most commonly appeared symptom when a healthy person adopts a compensatory forward head posture with a lower Craniovertebral Angle (CVA) than the normal healthy person. The purpose of this study was to determine the relationship between CVA with cervical pain, and Activities of Daily Living (ADL) in patients with neck pain. A cross sectional descriptive study was conducted by recruiting 75 neck pain patients between ages 25 and 55. Neck pain intensity was measured by the Numerical Pain Scale (NPS), ADL by the self-administrated Neck Disability Index (NDI), and CVA by the photogrammetry method. The photograph was analyzed using the Kinovea (Kinovea-0.9.5-x64) body posture analyzer software. The Pearson correlation test result was significant at the 0.05 level and a negative correlation was observed between CVA with cervical pain ($r=-0.658$) and level of disability ($r=-0.268$). Neck pain and level of disability tend to increase when a CVA decreases and vice versa.

Keywords: *Neck pain, Craniovertebral angle, Forward head posture*