

# Correlation of Shortening of Sternocleidomastoid Muscle with Forward Head Posture in IT Professionals

**Dr. Dhanashree P. Shinde (PT)<sup>1</sup> and Prajakta R. Kamble<sup>2</sup>**

Associate Professor, Department of Cardiovascular and Respiratory Physiotherapy

TMV's Jayantrao Tilak College of Physiotherapy, Pune, India<sup>1</sup>

Intern, TMV's Jayantrao Tilak College of Physiotherapy, Pune, India<sup>2</sup>

**Abstract:** *Background: Forward head posture (FHP) it is the most common postural deviations observed among individuals working for long hours on computers, particularly in the IT Professional. Prolonged sitting posture and continuous screen work can lead to adaptive shortening of the sternocleidomastoid (SCM) muscle, change in cervical alignment and increasing musculoskeletal strain. Identifying the correlation between SCM shortening and FHP can help in early prevention and ergonomic correction. The study could enhance understanding of postural dynamics in IT professionals potentially leading to effective prevention and treatment strategies for forward head posture and associated musculoskeletal disorders*

*Methods: The study was conducted among IT professionals aged between 25–30 years with more than 3 years' work experience. Participants with cervical fractures and non-IT backgrounds were excluded. Forward head posture was assessed using the craniovertebral angle (CVA) measured through the digital photogrammetry, and SCM muscle shortening was evaluated using the lateral flexion test. The collected data were analysed to determine the correlation between SCM muscle length and CVA.*

*Results: The study revealed a significant positive correlation between SCM shortening and craniovertebral angle, indicating that as the SCM muscle shortening, the degree of forward head posture increases. Participants with smaller CVA values showed greater SCM shortening, shows postural imbalance due to prolonged computer use.*

*Conclusion: There is significant correlation between the shortening of the sternocleidomastoid muscle with forward head posture in IT professionals. Prolonged sitting and poor ergonomic habits contribute to the muscular adaptation and altered cervical posture. Physiotherapy treatment including SCM stretching and strengthening, posture correction, and ergonomic modifications are to prevent neck dysfunction and postural strain in IT professionals..*

**Keywords:** Forward head posture, Sternocleidomastoid Muscle, Muscle Shortening, Craniovertebral Angle, Digital Photogrammetry, IT Professionals, Postural Assessment

