Abstract-45

## Forward Head Posture Adaptation Correlated with Scapular Dyskinesia Type1: A Case Study

Md Akhlaque, Undergraduate Student, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.

Shanthakumar Kalimuthu, Professor, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.

Jahanvi Dave, Assistant Professor, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University), Mullana, Ambala, Haryana, India.

## NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Shanthakumar Kalimuthu,

Professor, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, Maharishi Markandeshwar (Deemed to be University). Mullana, Ambala, Haryana, India.

E-mail: shantha.kumar@mmumullana.org

## **ABSTRACT**

People adapt poor posture particularly in the head and neck region, as a result of their sedentary lifestyles and use of technology. Forward head posture is most frequently, the most prevalent deviation from the natural bend of the cervical spine. Changes from the normal posture pattern led to pathological issues, which affect the surrounding muscles and joints. While forward head posture is also associated with Scapular Dyskinesia (SD) type 1, it is more observed in people who have forward head posture. SD type 1 is defined as the prominence of the inferior medial scapular border and its unusual rotation around a transverse axis. It is an uncommon type of SD that can occur in the aftermath of surgery or trauma. The outcomes are Scapular Dyskinesis Test, Numerical Pain Rating Scale, Neck Disability Index, Manual Muscle Testing, Shoulder range of motion, Lateral Scapular Slide Test and Posture Assessment. A 20-year-old male student with limited range of motion, forward

head posture, and mild shoulder pain was the subject of this case study. The goal was to use physical therapy techniques to reduce pain, enhance scapular function, and correct posture. Exercises for strengthening and mobilising the scapular joint or shoulder joint were used, which decreased discomfort, improved shoulder joint range of motion and correct forward head posture. The results of the study showed that SD type 1, forward head posture, and shoulder pain were all improved by advance manual therapy of the shoulder girdle joints and muscles. Improving shoulder function requires addressing scapular problems. In addition to advocating for holistic management measures to aid in their recovery, this research emphasises the significance of acknowledging SD as a major contributor to forward head posture.

**Keywords:** Neck disability index, Shoulder pain, Shoulder range of motion