International Journal of General Medicine and Pharmacy (IJGMP)
ISSN (P): 2319–3999; ISSN (E): 2319–4006
Vol. 13, Issue 1, Jan–Jun 2024; 97–106

International Academy of Science, Engineering and Technology
Connecting Researchers; Nurturing Innovations

EFFECTIVENESS OF PROPRIOCEPTIVE NEUROMUSCULAR FACILITATION STRETCHING ALONG WITH BREATHING EXERCISES ON EXPIRATORY PEAK VOLUME AND CHEST EXPANSION IN SUBJECTS WITH INTRINSIC ASTHMA

Banupriya Pandi[1], Karthika Govindaraj[2], Sivakumar Chinnusamy[3] & Pradeepa Mani[4]

[1]BPT Student, PPG College of Physiotherapy Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai

[2]Associate Professor, PPG College of Physiotherapy Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai

[3]Principal, PPG College of Physiotherapy Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai

[4]Vice Principal, PPG College of Physiotherapy Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai

ABSTRACT

Background of the Study: *Intrinsic Asthma is one of the several chronic diseases that are becoming increasingly problematic worldwide. The Global initiative for obstructive lung disease defined as airflow limitation that tends to be not fully reversible and which is usually both progressive and associated with an abnormal inflammatory response of the lungs. In intrinsic Asthma cases the major problem is reduced chest expansion which will leads to breathing difficulty and worsening of the lung volume.*

Objectives: *The objective of the study is find out the combined effectiveness of proprioceptive and diaphragmatic breathing exercises to improve chest expansion and expiratory peak volume in subjects with intrinsic asthma.*

Subjects and Methods: *It is a simple experimental study with convenient sampling technique. The study was conducted at outpatient department of ASHWIN MULTI SPECIALITY HOSPITAL, COIMBATORE. 10 intrinsic asthma subjects with moderate intrinsic were selected based on inclusion criteria with age group 45-55 years The subject were given 8 weeks of PNF Stretching, breathing exercises for about 45 min per session for 5 days. Pre and post-test values of chest expansion and expiratory peak volume was measured by using inch tape and peak flow meter test respectively.*

Result: *The statistical analysis showed that the calculated t value in paired 't' test for improve expiratory peak volume was 17.23 which was greater than the table t value 2.262.The statistical analysis showed that the calculated t value in paired 't' test for chest expansion on inch tape was 11.418 which was greater than the tablet value 2.262. Thus, the resultant of the study shows that there was significant improvement of chest expansion and expiratory peak volume among intrinsic asthma subjects*

Conclusion: *The study concluded that PNF stretch of pectoralis muscle and diaphragmatic breathing exercise on Chest expansion and Peak expiratory flow rate. It is an easy to use, less time consuming, easy to understand and most effective technique.*

Clinical Implications: *PNF Stretching combined with breathing techniques plays a vital role in chest expansion and expiratory peak volume to manage the intrinsic asthma patients.*

KEYWORDS: *Intrinsic asthma , PNF Stretching, Breathing exercises , Inch tape , Expiratory peakflow meter*

Article History

***Received:** 16 Jun 2024 | **Revised:** 16 Jun 2024 | **Accepted:** 25 Jun 2024*