

## Impact of the Dog-Technic for D1-D4 and Longitudinal Stroke Technique for Diaphragm on Peak Expiratory Flow (PEF) in Asthmatic Patients

**Authors :** Victoria Eugenia Garnacho-Garnacho, Elena Sonsoles Rodriguez-Lopez, Raquel Delgado-Delgado, Alvaro Otero-Campos, Jesus Guodemar-Perez, Angelo Michelle Vagali, Juan Pablo Hervas-Perez

**Abstract :** Asthma is a heterogeneous disease which has always had a drug treatment. Osteopathic treatment that we propose is aimed, seen through a dorsal manipulation (Dog Technic D1-D4) and a technique for diaphragm (Longitudinal Stroke) forced expiratory flow in spirometry changes there are in particular that there is an increase in the volumes of the Peak Flow and Post intervention and effort and that the application of these two techniques together is more powerful if we applied only a Longitudinal (Stroke). Also rating if this type of treatment will have repercussions on breathlessness, a very common symptom in asthma. And finally to investigate if provided vertebra pain decreased after a manipulation. Methods—Participants were recruited between students and professors of the University, aged 18-65, patients (n = 18) were assigned randomly to one of the two groups, group 1 (longitudinal Stroke and manipulation dorsal Dog Technic) and group 2 (diaphragmatic technique, Longitudinal Stroke). The statistical analysis is characterized by the comparison of the main indicator of obstruction of via area PEF (peak expiratory flow) in various situations through the peak flow meter Dataspir Peak-10. The measurements were carried out in four phases: at rest, after the stress test, after the treatment, after treatment and the stress test. After each stress test was evaluated, through the Borg scale, the level of Dyspnea on each patient, regardless of the group. In Group 1 in addition to these parameters was calculated using an algometer spinous pain before and after the manipulation. All data were taken at the minute. Results—12 Group 1 (Dog Technic and Longitudinal Stroke) patients responded positively to treatment, there was an increase of 5.1% and 6.1% of the post-treatment PEF and post-treatment, and effort. The results of the scale of Borg by which we measure the level of Dyspnea were positive, a 54.95%, patients noted an improvement in breathing. In addition was confirmed through the means of both groups group 1 in which two techniques were applied was 34.05% more effective than group 2 in which applied only a. After handling pain fell by 38% of the cases. Conclusions—The impact of the technique of Dog-Technic for D1-D4 and the Longitudinal Stroke technique for diaphragm in the volumes of peak expiratory flow (PEF) in asthmatic patients were positive, there was a change of the PEF Post intervention and post-treatment, and effort and showed the most effective group in which only a technique was applied. Furthermore this type of treatment decreased facilitated vertebrae pain and was efficient in the improvement of Dyspnea and the general well-being of the patient.

**Keywords :** ANS, asthma, manipulation, manual therapy, osteopathic

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