ABSTRACT

THE IMPROVEMENT OF FEV$_1$ AND SPO$_2$ VALUES AFTER “ASSISTED DRAINAGE THERAPY” TREATMENT FOR ALLERGIC ASTHMA PATIENTS

Background: The prevalence of asthma in all age is increasing, including in Indonesia. In several case reports reveal that asthma symptoms can be reduced by eliminating oral infection and control therapy of dental plaque through intraoral treatment which is called “Assisted Drainage Therapy” (ADT). Nevertheless until today there is no experimental research that has established the effectiveness of ADT method on the enhancement of FEV$_1$ and SPO$_2$ values in adult asthmatic patients. This study aims to 1. prove the improvement of FEV$_1$ value after Assisted Drainage Therapy for adults with allergic asthma, and 2. prove the improvement of SPO$_2$ value after Assisted Drainage Therapy for adults with allergic asthma. Methods: The subject of this experiment are 14 people who fulfill all of the criterias listed. All subjects underwent ADT treatment procedures. FEV$_1$ and SPO$_2$ values were measured both pre and post-therapy. Results: FEV$_1$ mean value before and after treatment were 70,17 (SD = 10,80) and 77,41 (SD = 10,31) respectively. There are significant differences between those two datasets (p = 0.000). SPO$_2$ mean value before and after treatment were 97,42 (SD = 1,15) and 98,75 (SD = 0,75) respectively. There are significant differences between those two datasets (p = 0.005). Conclusions: 1. There is improvement of FEV$_1$ value after Assisted Drainage Therapy for adults with allergic asthma, and 2. There is improvement of SPO$_2$ value after Assisted Drainage Therapy for adults with allergic asthma.

Keywords: Asthma, Assisted Drainage Therapy, Allergy, FEV$_1$, SPO$_2$, Adult.