

Modulation of Stress Mediator and Asthma Control Level with Hypnotherapy in Psychogenic Asthma Patient

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Abstract : Hypnosis that uses mind ability to affect symptoms and physical function has been rarely developed as standard therapy in asthma. This study aimed to observe hypnotherapy effectivity as standard asthma therapy indicated by asthma level control and stress mediator (norepinephrine and cortisol). The method used pre and post-test design started from September 2014 to May 2015 in Pulmonology Division, Sebelas Maret University/Dr Moewardi Hospital Surakarta. 30 non-atypic psychogenic asthma patients were chosen randomly that completed full inclusion criterias. Variation of variables (norepinephrine and cortisol) was measured with Wilcoxon test, Marginal Homogeneity test to evaluate asthma control level, and Ordinal Regression and Logistic Regression test to analyze external variables that may influence hypnotherapy effects. The results showed norepinephrine levels significantly increased in both of groups after hypnotherapy [106,40 (4,9–365,30) pg/mL vs 276,70 (80,80–679,60) ng/mL; $p=0,001$], insignificant decreased cortisol levels in both of groups after hypnotherapy [10,93 (0,31–52,00) $\mu\text{g/mL}$ vs 9,6 (0,26 – 23,58) $\mu\text{g/mL}$; $p=0,382$], and also increased asthma control levels in both of groups after hypnotherapy (0% vs 46,7%; $p=0,001$). There was no external variables that influence hypnotherapy result in norepinephrine levels, but The research found significant external variables that may influence hypnotherapy result in cortisol levels that is allergens trigger history ($p=0,048$), and also smoking history ($p=0,005$) and sex ($p=0,03$) in asthma control levels. It can be concluded that hypnotherapy was effective to repair stress mediators and increase asthma control level in standard asthma therapy of psychogenic asthma patients.

Keywords: psychogenic asthma, hypnotherapy, epinephrine, cortisol, asthma control level.