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A randomized, double blind clinical trial of commercial garlic on improvement of lung functions in asthmatic patients

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Bronchial asthma is characterized by both a decline in lung functions and periods of acute deterioration in symptoms called exacerbations. The aim of this study was to investigate the effects of garlic on lung functions in acute exacerbations in asthma. Asthma patients attending to the clinic were randomized into 2 groups. One group was given commercial garlic and other group was given the placebo (900mg /day) for 3 months and followed by 2 months of drug free interval. Treatment was continued again for next 2 months and lung functions were assessed during the follow up. Clinical status of the asthma was assessed using asthma symptom score. There was a significant difference in vital capacity (VC), Forced vital capacity (FVC), forced expiratory volume (FEV1), peak flow rate (PFR) and mid expiratory flow rate (MEFR) in garlic treated group but not in control group. Addition, there was a statistically significant difference in increase of FEV1/FVC ratio only in test group. Reduction of air trap in lungs was significant in test group compared to the control. VC, FVC, FEV1 and PFR values were static during the drug free period and increased again with the commencement of the therapy, in garlic group. Our data suggests that therapeutic effect of garlic is rapid in onset and have long lasting effects on bronchial relaxation. Beneficial effects observed with garlic therapy in asthma patients can be explained by effects as muscle relaxant, anti-inflammatory and immune modulator effects caused by garlic.