

Parenteral smoking affects asthma status of their children

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Abstract

Objectives: While the prevalence and severity of asthma influenced by environmental factors, the effect of parenteral smoking on asthma status of their children was examined. **Methodology:** 90 asthmatic children, 32 with smoker and 58 with non-smoker parents were studied in two sessions three years apart by evaluating respiratory symptoms (RS) prevalence and severity, various drugs used and pulmonary function tests (PFT) including forced vital capacity, forced volume in the first second, peak expiratory flow, and maximum expiratory flow at 75, 50 and 25% of vital capacity (FVC, FEV1, PEF, MEF75, MEF50, MEF25 respectively). **Results:** The prevalence and severity of all RS were significantly increased in asthmatic children with smoking parents after 3 years except prevalence and severity of night wheeze and the prevalence of chest wheeze ($p < 0.05$ to $p < 0.001$) but PFT values were non-significantly reduced. In asthmatic children with non-smoking parents, the prevalence and severity of RS were decreased after 3 years which was significant for night and chest wheeze for prevalence and night cough and chest wheeze for severity (all, $p < 0.05$) and PFT values were increased which were statistically significant for FVC, FEV1, MEF50 and MEF25 ($p < 0.05$ to $p < 0.01$). Drugs used by the group with smoking parents were increased and were significantly higher than their reduction in the groups with non-smoking parents at the end of the study ($p < 0.05$ for fluticasone propionate 125/salmeterol and budesonide 160/formoterol). **Conclusion:** Long-term parenteral smoking increased prevalence and severity of RS and drug used but decreased PFT values of their asthmatic children.

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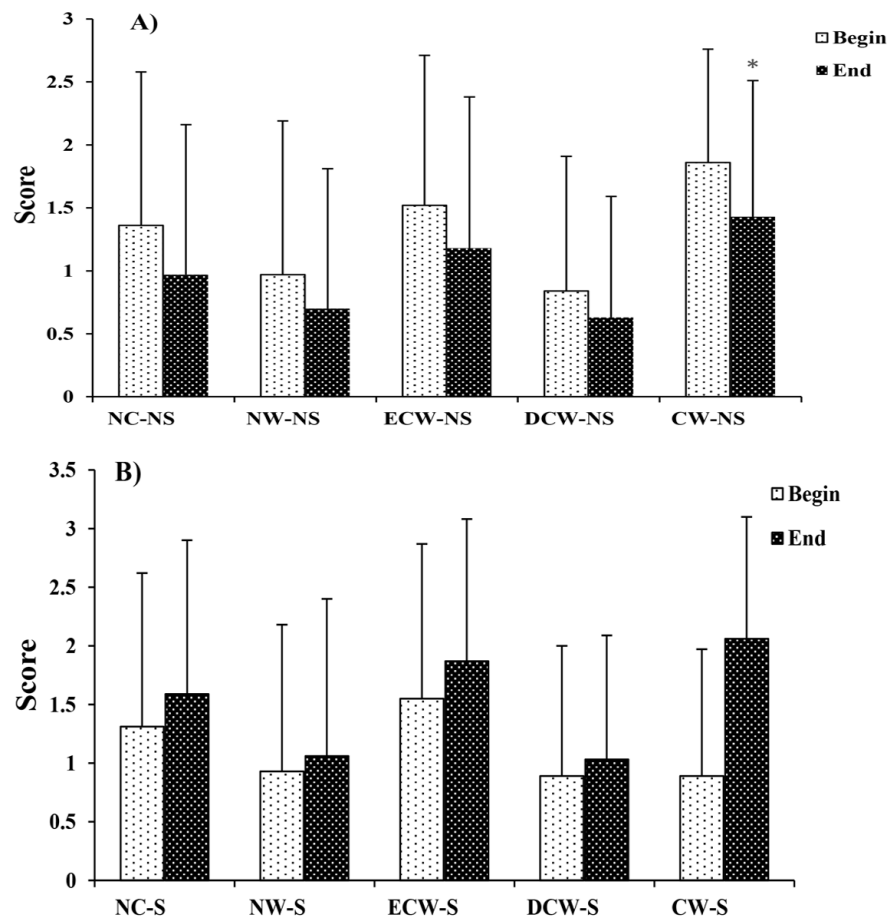


Figure 1

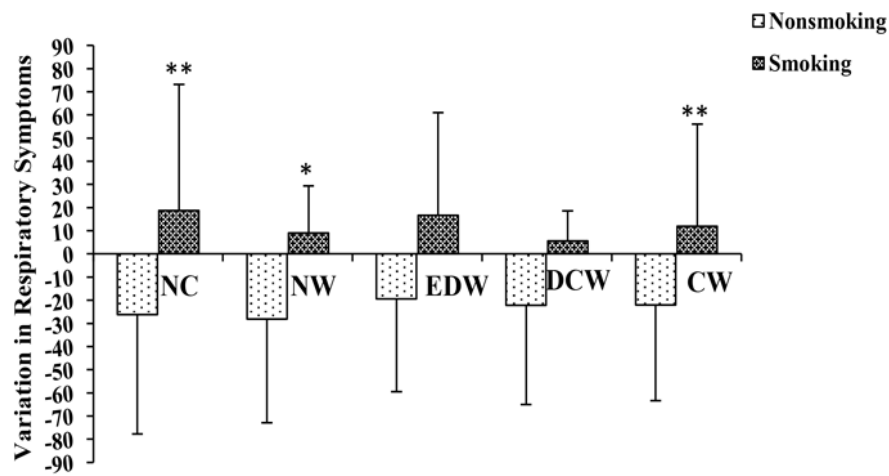


Figure 2

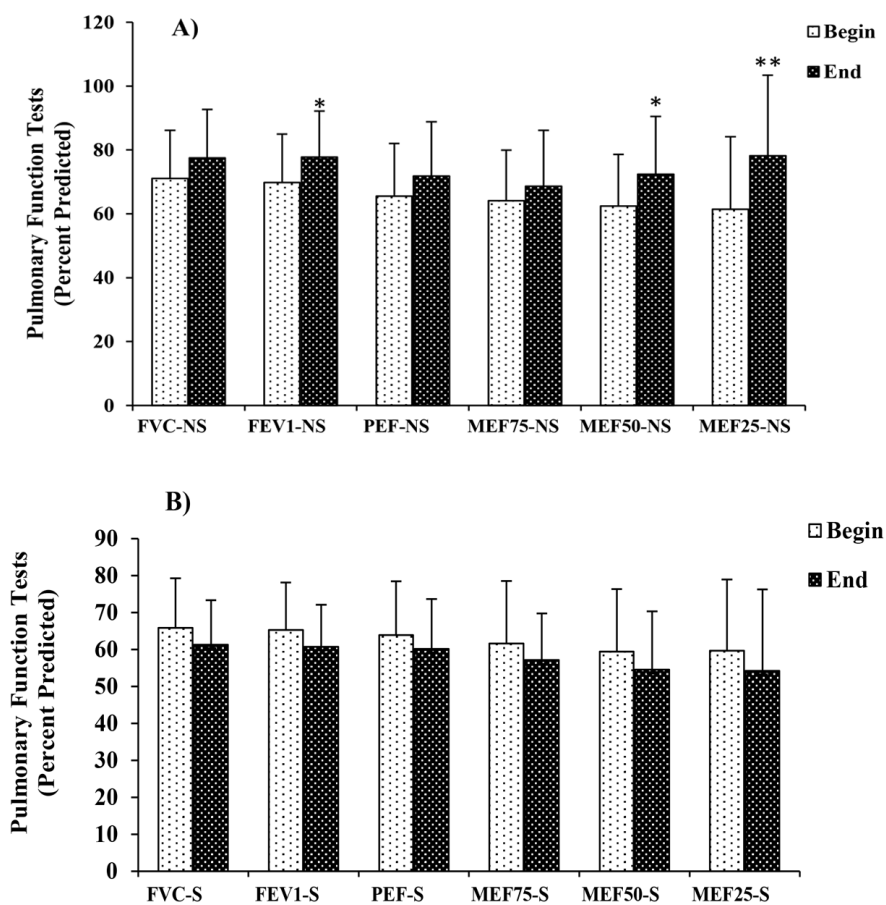


Figure 3.

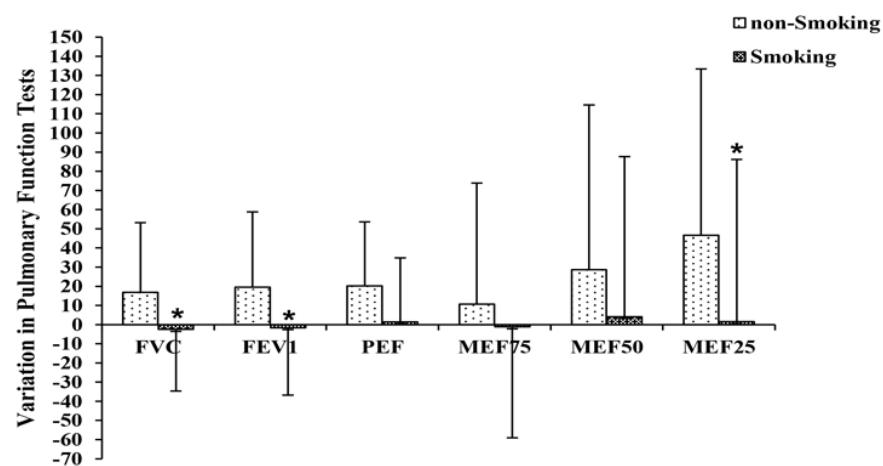


Figure 4