

European Respiratory Society Annual Congress 2013

Abstract Number: 3710

Publication Number: P4124

Abstract Group: 5.1. Airway Pharmacology and Treatment

Keyword 1: Asthma - management **Keyword 2:** Children **Keyword 3:** Treatments

Title: L-carnitine improves the asthma control in children with moderate persistent asthma

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Body: The objective. was to investigate L-Carnitine level and the effects of its supplementation in children with moderate persistent Asthma. Methods. Free and total serum carnitine levels were measured in 50 children having moderate persistent asthma and 50 healthy control children. The patients group was randomly divided into two subgroups. Subgroup A was supplemented with LCarnitine for 6 months while subgroup B was used as a placebo controls. Both subgroups were assessed by pulmonary function tests (PFT) and childhood-asthma control test (C-ACT) before and 6 months after carnitine supplementation. Results. Total and free carnitine levels were significantly lower in patient group than in control group. PFT and C-ACT showed significant improvements in asthmatic children supplemented with L-Carnitine than in those who were not supplemented. Conclusion. L-Carnitine levels were initially lower in moderate persistent asthmatic children as compared to healthy control children. Asthmatic children who received L-Carnitine supplementation showed statistically significant improvement of C-ACT and PFT.