Title: Anti-inflammatory effect of low dose theophylline in school children with bronchial asthma

Body: Background: Treatment with theophylline is important with the patients suffering from moderate bronchial asthma. Few studies have shown that the late asthmatic response to an allergen challenge is inhibited by theophylline. Methods: The objective of the research work is to point whether a low dose of theophylline has anti-inflammatory effect in asthma. We have analyzed a group of 30 asthmatic school children for 8 weeks. They received 125 mg theophylline twice daily. In all patients FEV1, symptom score, and reduction of the eosinophil number in the peripheral blood were determined. Results: After the treatment we noticed an increase of values of FEV1 from (71± 3.2) to (96± 2.1) improving symptom score (p< 0.01) and eosinophil number in the peripheral blood reduction (p< 0.01). Conclusion: During the treatment improvement of symptoms and lung function were noticed. Low dose theophylline is safe and has inhibitory effect on airway inflammation.