

عنوان مقاله:

Determine Efficacy of a Short Course of Montelukast in Children with Intermittent Asthma and Viral Infection

محل انتشار:

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خلاصه مقاله:

Introduction Mild intermittent asthma is common in children and viral infections are responsible for the majority of exacerbations. As leukotrienes are potent inflammatory mediators, some studies have shown that Montelukast, a leukotriene receptor antagonist, may be effective on reduction of asthma symptom. To determine whether a short course of Montelukast in asthmatic children with common cold would modify the severity of an asthma episode.

Materials and Methods Children, aged 6-12 years with intermittent asthma participated in this randomized, double-blind, placebo-controlled clinical trial. Treatment with Montelukast or placebo was initiated at the onset of viral upper respiratory tract infection and continued for 7 days. Primary outcomes included the clinical manifestation: duration of episodes, daily symptom, nights symptoms and activity limitation. Secondary outcomes included the need for beta agonist usage, oral prednisolone, physician visit, hospital admission and school absence.

Results A total of 187 children with intermittent asthma were randomized, 93 to Montelukast group and 94 to placebo group. Montelukast significantly decreased the cough by 17.3% ($P<0.001$), nighttime awakenings by 5.4% ($P=0.01$), interference with normal activity by 6% ($P<0.01$), time off from school by 6% ($P<0.01$), β -agonist usage by 17.2% ($P<0.001$) and doctor visits by 12.2% ($P<0.01$) compared to placebo. Whereas there was a non significant reduction in wheezing, tachypnea, respiratory distress, asthma exacerbation, oral prednisolone and hospitalization ($P=0.8$).

Conclusion A short course of Montelukast, introduced at the first sign of a viral infection, results in a reduction in cough, β -agonist use and nights awakened, time off from school and limitation of activity. More studies are needed to evaluate the optimal dose and duration of treatment.

کلمات کلیدی:

Intermittent Asthma, Montelukast, Viral infection

