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To Study the Efficacy of Inhaled Budesonide vs Oral Montelukast in Control of Mild Persistant Asthma in Children Between 5-18 Years of Age



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Biography

Neha Raghava completed my M.B.B.S in year 2013 from Manipal, India and my MD Pediatrics in 2017 from Meerut, India. Currently working as a Pediatrician in Safdarjung Hospital New Delhi, India.



Abstract

Introduction

Asthma consensus guidelines recommend the use of controller agents to control asthma symptoms and reduce inflammation in patients with mild persistent asthma. In children, Budesonide inhalation suspension and Montelukast have demonstrated efficacy in controlling mild persistent asthma.

Materials and methods

Children with mild persistent asthma, aged 5 to 18 years, were recruited from the OPD of pediatrics of C.S.Subharti Hospital. A prospective, controlled study design was used. Patients received either inhaled budesonide [(GROUP A, N=30), 200µg once a day]; or montelukast [(GROUP B, N=30) (5≤14 years, 5 mg; >14 years, 10 mg)] for 90 days. Outcome measures included improvement in the number of asthma attacks, percentage improvement in the absolute eosinophil count (AEC), percentage predicted of normal force expiratory volume in 1 second (FEV1%) and percentage improvement in the Peak Expiratory Flow Rate(PEFR) after 90 days of treatment.

Results

Significant improvement in the frequency of asthma attacks, % improvement in the AEC, FEV1%, % improvement in the PEFR in both, group A and B were seen. More significant improvement in frequency of asthma attacks (p=0.05) and FEV1% (p=0.002), was seen in group A, compared to group B. Oral montelukast was better in terms of % improvement in the AEC (p=0.002).

Conclusion

Inhaled Budesonide is superior to oral Montelukast in treatment of mild persistent asthma in 5 to 18 years children in terms of improvement in frequency of asthma attacks, percentage improvement in AEC and PFTs over 12 weeks period

Publication

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