PREVALENCE AND USE OF RESCUE MEDICATION IN STABLE ASTHMA PATIENTS

N. Premkumar¹, Sreeraj.K¹, J.N.Dharsana², Arun.B³, Nigeeth.M⁴

¹Dept.of Pharmacy Practice, Academy of Pharmaceutical sciences, Kerala
²Dept.of Pharmaceutical chemistry, Academy of Pharmaceutical sciences, Kerala
³Dept.of Microbiology, Academy of Medical sciences, Kerala
⁴Final B.Pharm, Academy of Pharmaceutical sciences, Kerala

ABSTRACT

Objective: The objective of this study was to determine the use of rescue medication in stable asthma patients Study design: The study was conducted in few Private hospitals in North Malabar region of Kerala state. The study was designed as a prospective open label study. A total of 115 patients with moderate to severe asthma were included in this study. Results: The study population consisted of 115 patients of these 79(68.7%) were males and 36(31.3%) were females. Of these 115 patients, 32 (27.8%) patients were received the salbutamol as rescue medication and 83(72.2%) were not received rescue medication in asthma therapy. Conclusion: As per GINA guidelines salbutamol should be considers as rescue medication for moderate to severe in stable asthma patients. In this study, use of salbutamol as rescue medication in asthma treatment was found to be minimal in this area. Salbutamol inhaler should be included as rescue medication to control acute exacerbations.

Keywords: Rescue medication, exacerbations, GINA.

INTRODUCTION

Prevalence of asthma varies from region to region depending upon the definition used for diagnosis of asthma. Asthma management plans have, however, reduced mortality and severity in countries where they have been applied. At the present time, there is no cure for asthma, but effective management can reduce the impact of asthma on quality of life and morbidity. Successful clinical management relies on providing long-term asthma control.
However, given the variability of asthma, long-term control requires flexible and tailored management. Antiasthmatic drugs commonly used by physicians in their clinical set up with mild to severe asthma with respect to the drug choice as per GINA guidelines.

Bronchodilators should not be the only or main treatment in patients with severe or unstable asthma. Severe asthma requires regular medical assessment as death may occur. Patients with severe asthma have constant symptoms and frequent exacerbations, with limited physical capacity, and PEF values below 60% predicted at baseline with greater than 30% variability, usually not returning entirely to normal after a bronchodilator. These patients will require high dose inhaled corticosteroid therapy and long acting $\beta_2$ agonist and essential salbutamol as rescue medication for a severe asthmatic in treating acute exacerbations. Salbutamol Inhaler should be used to relieve symptoms when they occur and to prevent them in those circumstances recognized by the patient to precipitate an asthmatic attack (e.g. before exercise or unavoidable allergen exposure). Salbutamol Inhaler is particularly valuable as rescue medication in mild, moderate or severe asthma, provided that reliance on it does not delay the introduction and use of regular inhaled corticosteroid therapy.

**Literature Review**

For patients whose asthma is not sufficiently controlled by a low dose of ICS, an alternative option to increasing the ICS dose is the addition of a LABA such as formoterol or salmeterol. Several studies have shown that the combined use of LABA with low-to-moderate doses of ICS provides greater clinical benefit than further increasing the dose of ICS (Greening et al., 1994; Woodcock et al., 1996; Pauwels et al., 1997; Lalloo et al., 2001). Indeed, the use of a low-dose ICS plus a LABA is now the preferred treatment option for patients with moderate persistent asthma (NIH 2002). Preventing asthma exacerbations is one of the main goals of asthma therapy. Several studies have shown that regular treatment with anti-inflammatory agents can reduce the risk of mild and severe asthma exacerbations (Donahue et al., 1997; Eisner et al., 2001).

**Objective**

The objective of this study was to determine the use of rescue medication (salbutamol) in stable asthma patients.
Methodology
The study was conducted in few Private hospitals in North Malabar region of Kerala state. The study was designed as prospective open label study. Inclusion criteria: Asthmatic patients between the age group of 30 - 60 years. Patients with stable asthma belonging to global initiative on Asthma (GINA) Grade III and IV were included in the study i.e., moderate to severe asthmatic patients.

RESULT
The study population consisted of 115 patients of these 79(68.7%) males and 36(31.3%) females. Of these 115 patients, 32 (27.8%) patients were received salbutamol as rescue medication and 83(72.2%) were not received rescue medication. The details has been shown below

DISCUSSION
International treatment guidelines for asthma\textsuperscript{1,2} recommend the combination of an inhaled corticosteroid and a long-acting $\beta_2$ agonist with the addition of a short-acting $\beta_2$ agonist for relief of symptoms in patient with asthma. As the asthma symptoms becomes more severe, the therapeutic option is to add a short acting inhaled $\beta_2$-agonists, such as salbutamol, as rescue medication to cause rapid relief. All available combinations of inhaled corticosteroid plus long-acting $\beta_2$ agonist have similar efficacies in patients with moderate-to-severe asthma when given with a short-acting $\beta_2$ agonist as reliever.\textsuperscript{3,4} Several studies have assessed the impact of LABA/LAMA combination therapy on patient-reported respiratory symptoms, and on the use of rescue medication to relieve symptoms.
CONCLUSION

As per GINA guidelines salbutamol should be considered as rescue medication for mild to severe stable asthma patients. In this study, use of salbutamol as rescue medication in asthma treatment was found to be minimal in this area. Salbutamol inhaler should be included as rescue medication to control acute exacerbations.

Recommendation

Present study did not assess the PFT and not categorized the patient’s severity. More precise result can be obtained in this study for further extend to the area of PFT and QoL.

REFERENCE


