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A COMPARATIVE STUDY TO EVALUATE EFFICACY OF FEXOFENADINE HYDROCHLORIDE AND BILASTINE IN ALLERGIC RHINITIS.

Otorhinolaryngology

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ABSTRACT

Allergic rhinitis is a common and debilitating disease affecting quality of life. Antihistamines are the mainstay of treatment. This study compared both bilastine and fexofenadine, potent antihistamines for their efficacy. Method – 100 patients aged between 12 – 65 yrs with allergic rhinitis were selected and grouped into group 1 (receiving fexofenadine 120mg) and group 2 (receiving bilastine 20 mg).Total symptom scores were evaluated pre and post treatment. **Result –** Bilastine scored better than fexofenadine group.

KEYWORDS

Allergic rhinitis, antihistamine, bilastine, fexofenadine

INTRODUCTION -

Allergic rhinitis is an IgE mediated hypersensitive disease of the mucous membrane of nasal airway characterized by sneezing, itching, watery nasal discharge and sensation of nasal obstruction.[1] It represents a global health problem affecting 10 to 25% of population .[2] Allergic rhinitis is not itself life threatening(unless accompanied by severe asthma or anaphylaxis),morbidity from the condition can be significant which includes chronic rhinosinusitis, nasal polyposis, bronchial asthma, orthodontic problems and other ill effects of prolonged breathing, especially in children. Antihistamines are the mainstay of treatment recommended for both intermittent and persistent allergic rhinitis.[3] This study was taken up to compare two antihistamines which have been demonstrated to be effective in many individual studies.

MATERIALS AND METHODS –

For the study,100 patients diagnosed with allergic rhinitis and aged between 12 – 65 years were chosen among outpatients attending department of ENT, Kempegowda institute of medical sciences, Bangalore. Patients who were willing to participate in the study were evaluated by means of detailed history taking, physical examinations and relevant investigations. Patients with coexisting upper respiratory tract infection including sinusitis, pregnant and lactating women, coexisting systemic disease and recent antiallergic treatment were excluded from the study.

Baseline symptoms scores were recorded in the diary (table 1).The patients were sequentially randomized into 2 groups – Group 1 were receiving persistent fexofenadine hypochloride 120 mg once a day for 4 weeks and Group 2 received bilastine 20 mg once a day for 4 weeks. During 4 weeks treatment period, patients were evaluated at weekly interval by scoring on symptom diary.

Table - 1

Symptoms evaluation score	Description	Definition
0	Absent	No symptoms
+	Mild	Symptoms present but not troublesome
++	Moderate	Symptoms frequently troublesome but not disturbing daily activity or sleep
+++	Severe	Symptoms disturbing daily activity

RESULTS –

There were 23 males and 27 females in group 1 and 32 males and 18 females in group 2. Mean age of patients in group 1 was 32.74 years and group 2 was 30.52 years. The duration of symptoms were statistically similar in both groups. Mean total symptom score before treatment were 13.25 in group 1 and 13.42 in group 2.There was significant reductions in both the groups during the treatment and at the end of the study (table 2).Group 2 scored better than group 1 in all parameters.

Table-2

Total symptom score	Group 1	Group 2
Before treatment	13.25 Minimum-8 Maximum-15	13.42 Minimum-8 Maximum-16
First week	9.78	8.72
Second week	7.60	6.96
Third week	3.43	2.47
Fourth week	2.41	1.73
P value	P<0.001	P<0.001

DISCUSSION –

Antihistamines are effective medications that has been used for decades in the management of allergic rhinitis. Effectiveness includes good efficacy in relieving sneezing, rhinorrhea and nasal itching, anti-inflammatory properties to reduce nasal obstruction, rapid onset of action and a long duration of effect.[4]

Both fexofenadine and bilastine are well established in the treatment of allergic rhinitis. Fexofenadine an active metabolite of terfenadine is the second generation antihistamine drug and is a nonsedative, selective histaminic H1 receptor against having rapid and long acting activity with no antioxidant effect.[5]

Bilastine is a newly developed H1 antihistamine with high selectivity for H1 receptor, and others including serotonin, leukotriene. [6] In our study bilastine showed better effect than fexofenadine in decreasing total nasal symptoms score through there was significant reduction in score in both the groups. Similar changes were seen in studies by Honk Friedrich and Kinpatal.[7,8]

CONCLUSION –

Both the drugs showed significant improvement in quality of life in allergic rhinitis patients. But, bilastine showed more effectiveness as compared to fexofenadine in reducing total symptoms score.

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