ANTI-HISTAMINES IN ALLERGIC RHINITIS - A COMPARATIVE ANALYSIS

Dear Editor,

Allergic Rhinitis is a very common clinical entity which occurs when genetically susceptible individuals experience an IgE antibody related response to allergens. Allergic rhinitis needs to be differentiated clinically from nonallergic or vasomotor rhinitis. The symptoms of sneezing, nasal and ocular itching are found to be more predominant in allergic rhinitis while rhinorrhoea and nasal obstruction are more predominant in vasomotor rhinitis [1]. Antihistamines are the mainstay of treatment of allergic rhinitis, they act by blocking histamine receptors or by inhibiting reuptake of noradrenaline from nerve terminals thus producing sympathomimetic effects resulting in relief of rhinorrhoea and nasal obstruction [2].

A large number of antihistamines are currently available for treatment of allergic rhinitis. Choosing an antihistamine for a patient of allergic rhinitis is always a dilemma. To test the efficacy of various antihistamines, a clinical trial was carried out at our hospital to compare the efficacy, safety and side effects of various antihistamines both of first and second generations. 75 established cases of allergic rhinitis were randomly treated with various antihistamines. Prior to starting the treatment, complete ENT and general examination was done. All patients had routine blood and urine analysis along with the skiagrams of the paranasal sinuses. The patients were divided into three groups. The first group was treated with first generation antihistamines, the second group with second generation antihistamines and the third group with topical antihistamines. The patients were reviewed weekly, their symptoms were assessed on a three point scoring scale ie, + indicating low response, ++ for moderate response and +++ indicating good response. The different symptoms of rhinorrhoea, sneezing, nasal itching, nasal obstruction, and ocular itching were studied. The patients were especially asked about side effects such as dryness of mouth, drowsiness, sedation and inability to concentrate.

The results of this study carried were analysed and are summarised in Table-1. All patients in the group treated with first generation antihistamines had moderate improvement in allergic symptoms but had associated side effect of sedation and dryness of mouth. Those treated with second generation antihistamines, had improvement in symptoms of sneezing and nasal itching but with little control of rhinorrhoea. In both these groups however nasal obstruc-

tion was not significantly relieved. The best results were found in those patients who were treated with topical antihistamine, wherein there was improvement of both antiallergic symptoms of nasal itching and sneezing as well as relief of nasal obstruction and also there were no systemic side effects.

TABLE 1

Comparison of pharmacotherapeutic agents in relief of allergic symptoms

	Anti-H1 (sneezing, itching)	Anti-Ach (rhinorrhoea)	Sedation	Nasal obstruction	Eye Symptoms
First generation					
Chlorpheniramine (Avil)	++	++	+	-	+
Triprolidine (Actified)	++	++	+	-	+
Cyproheptadine (Periactin)	++	++	++	-	+
Promethazine (Phenergan)	+++	+++	+++	-	+
Second generation					
Terfenadine	+++	-	-	-	+
Astemizole	+++	-	-	-	+
Fexofenadine	+++	-	-	-	+
Cetirizine	+++	-	+	-	+
Topical antihistamine					
Azelastine	++	++	-	+	-

References

1. Harry R. Vasomotor rhinitis BMJ 1987;294:138.
2. Jain K. Pharmacological basis of nasal therapy. IJLO & Head & Neck Surgery 1994;3:2-5.

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UNIVERSAL TONGUE BLADE FOR TONSILLECTOMY

Dear Editor,

Routinely during tonsillectomy a Boyle Davis mouth gag with tongue blade is applied to open the oral cavity and to keep the tongue away from the operative field. While the mouth gag is of a standard universal size the tongue blade has to be changed for an adult or child depending upon the size of the oral cavity. Since all tongue blades fitted on the mouth gag have similar dimensions for the handle and only the tongue plate varies in size depending on adult or paediatric patient a modified tongue blade having separate detachable handle and tongue plates has been designed and successfully tried at our hospital.

The tongue blade consists of two parts :

(a) A universal handle six inches in length, which is hooked at one end to fit onto Draffins bipods and has a socket at the proximal end with a tempered side screw for fitting the tongue plate. The outer surface of the handle is grooved on which the Boyle Davis mouth gag can slide.

(b) Tongue plates of different sizes from paediatric to adult.

Fig. 1 : Universal tongue blade