

## 혈관운동성비염의 임상적 특징과 국소 Ipratropium Bromide의 치료 효과

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### Vasomotor Rhinitis : Clinical Characteristics and Efficacy of Intranasal Ipratropium Bromide

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#### —ABSTRACT—

**Background and Objectives** : Vasomotor rhinitis (VMR) has similar symptoms compared to the allergic rhinitis (AR). Many doctors still use the same AR medicine without exact diagnosis, even if the patient has VMR. The aims of this study are clinical feature of VMR and efficacy of intranasal ipratropium bromide. **Materials and Method** : The study was designed prospectively. The subjects consisted of 38 patients with VMR who had been treated between 2003 and 2004. Diagnostic criteria include rhinitis symptoms lasting more than 3 months, no eosinophilia in nasal smear test, and negative results for MAST and allergic skin test. The patients were treated with intranasal ipratropium bromide for 4 weeks and compared pre-treatment and post-treatment symptom scores. **Results** : Chief complaints of the patients was nasal obstruction, followed by rhinorrhea, sneezing, and itching. After treatment, the average symptom score of rhinorrhea was significantly improved from 1.5 to 0.5 ( $p < 0.05$ ) and 21 patients (84%) general symptom score was decreased. **Conclusion** : Ipratropium bromide is useful medicine for treatment of VMR, especially to control of rhinorrhea. (*J Clinical Otolaryngol* 2005;16:235-239)

**KEY WORDS** : Vasomotor rhinitis · Ipratropium bromide.

#### 서 론

(vasomotor rhinitis, VMR)

가가

<sup>1)</sup>

, ipratropium bromide

<sup>2)</sup>

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ipratropium bromide

**Table 1.** Scoring criteria of nasal symptoms in questionnaire

Symptom score	0	1	2	3
Nasal obstruction	None	Intermittent	Frequent	Continue
Rhinorrhea (blow per day)	0	1 - 10	11 - 20	>20
Sneezing (number per day)	0	1 - 5	6 - 10	>10
Itching	None	Mild	Moderate	Severe
Posterior nasal drip	None	Intermittent	Frequent	Continue
Headache	None	Mild	Moderate	Severe

**재료 및 방법**

3  
2003 3 2004 6  
38  
가 15 , 가 23  
14 80 40.7 , 40  
59 가 17 (45%) 가  
, 20 39 가 11 (29%), 60 6  
(16%), 19 가 4 (11%)

**Table 2.** Age distribution at diagnosis and onset of VMR

Age (year)	Number of patient (%)	
	Onset	Diagnosis
0 - 19	7 (18%)	4 (11%)
20 - 39	10 (26%)	11 (29%)
40 - 59	17 (45%)	17 (45%)
60 - 79	4 (11%)	6 (15%)
Total	38	38

MAST(multiple antigen simultaneous test, Hitachi Chemical Diagnostic, USA)

Rhinovent®(ipratropium bromide, Hanlim Pharm. Co., Korea) 4

- 1) ,
- 2) 10%
- 3) MAST
- 4) )<sup>3)</sup>

ipratropium bromide  
1 2  
ipratropium bromide  
paired t - test  
, p 0.05

**결 과**

6 74 42.4 40  
가 17 (45%)  
59  
(Table 2).  
0 3 4 가 (Table 1). (45%) 가





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## Ipratropium Bromide

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