

외인성 기관지천식과 알레르기성 비염의 연관성

가¹,²
신승현¹ · 최재욱¹ · 이상채² · 현대성² · 최병렬²

Clinical Relationship between Extrinsic Bronchial Asthma and Allergic Rhinitis

Seung Heon Shin, MD¹, Jae Wook Choi, MD¹, Sang Chae Lee, MD²
Dae Sung Hyun, MD² and Byung Ryul Choi, MD²¹Department of Otolaryngology Head and Neck Surgery,²Internal Medicine, Catholic University of Taegu Hyosung, School of Medicine, Taegu, Korea

- ABSTRACT -

Background : Allergic rhinitis and bronchial asthma are closely related in epidemiology and natural history and typically represent a type I hypersensitivity reaction. But the relationship between upper and lower airway manifestation of allergy remain incompletely investigated. **Objectives** : The aim of this study was to compare the results of allergic examinations between extrinsic bronchial asthma and allergic rhinitis. **Materials and Methods** : In this study, we compared several allergic examinations : nasal smear, peripheral blood eosinophil count, serum total IgE level, skin prick test, and multiple allergosorbent test chemiluminescent assay (MAST CLA), in 59 extrinsic bronchial asthma patients, 21 extrinsic bronchial asthma with allergic rhinitis patients, and 47 allergic rhinitis patients. **Results** : In extrinsic bronchial asthma, positive (>10%) nasal smear was 2.7%, positive (>500/ul) blood eosinophil count was 27.1%, positive (>100 IU/ml) serum total IgE was 71.2%, the mean number of positive MAST CLA was 1.75, and the mean number of positive skin reaction was 2.38. In extrinsic bronchial asthma with allergic rhinitis patients, test results were 20.0%, 28.6%, 76.2%, and 3.00, 4.29 respectively. And in allergic rhinitis patients, test results were 93.3%, 14.9%, 76.6%, and 2.38, 2.40 respectively. **Summary** : The patients with allergic rhinitis and bronchial asthma have higher blood eosinophil count than allergic rhinitis and much polysensitized than bronchial asthma and allergic rhinitis. (**J Clinical Otolaryngol 1999;10:41-45**)

KEY WORDS : Extrinsic bronchial asthma · Allergic rhinitis · Allergic test.

서 론

Edwards¹⁾ 20%

가

: 1998 8 30

: 1998 12 24

: , 705 - 718

3056 - 6

가

: (053) 650 - 4528 · : (053) 650 - 4533

가 , Wright - Giemsa , 95%
 (× 400)
 가 10%
 대상 및 방법 (Cobas Argos 5 differential count. Roche. Sw -
 iss) 가 ul 500
 IgE PRIST (paper ra -
 dioimmunosorbent test) 100 IU/ml
 1997 2 7 47
 80 (28 , 19 , 25.4)
 , , IgE, MAST, MAST CLA allergy system(MAST Immunocy -
 stems, CA, USA) 21 (30
 11 , 10 , 41.8)
 , 59 (29 , 30 ,
 49.9) 가 .
 Bencard 14 , 7 , 2 , 7
 30 . MAST 3)
 class 2 ,
 20 60 , 15
 Chi - square test One way Anova
 , 0.1% histamine
 2)
 , , 50% 1 + ,
 가 , 50% 2 + ,
 , IgE, 3 + , 4 + , 50%
 glycerol
 , 2 +

Table 1. Results of allergic tests in three groups

	Bronchial Asthma(%)	Bronchial Asthma & Allergic rhinitis(%)	Allergic rhinitis(%)	p value*
Nasal smear				
Positive (> 10%)	1 (2.7)	3(20.0)	36(92.3)	<0.05
Negative	36(97.3)	12(40.0)	3(7.7)	
Mean eosinophil (%)	0.92	15.33	36.18	
Blood eosinophil				
Positive (> 500/ul)	16(27.1)	6(28.6)	7(14.9)	<0.05
Negative	43(72.9)	15(71.4)	40(85.1)	
Mean eosinophil count	451.8 ± 508.5	398.6 ± 292.4	239.4 ± 220.3	
Total serum IgE				
Positive (100IU/ml)	42(71.2)	16(76.2)	36(76.6)	> 0.05
Negative	17(28.8)	5(23.8)	11(23.4)	
Mean total IgE level	624.1 ± 550.8	616.7 ± 556.0	546.8 ± 551.8	

* : Evaluated with chi-Square test

결 과

MAST CLA와 피부단자검사(Table 2)

비좁도말검사

가 1.75 , 3.00 , 2.38 , An-ova 가 가 (p<0.05).

37 (62.7%), 15 (75.4%), 39 (83.0%) 가 10% 1 (2.7%), 3 (20.0%), 36 (93.3%) (p<0.05), (20.3%), (11.9%), (32.2%), (6.8%) (p<0.05, Table 1).

말초 혈액 호산구검사

가 500/ui 가 16 (27.1%), 6 (28.6%), 7 (14.9%) , 451.8 ± 508.5, 398.6 ± 292.4, 239.4 ± 220.3 가 (p<0.05), (p<0.05, Table 1).

혈청 총 IgE검사

PRIST IgE 가 100 IU/ml 42 (71.2%), 16 (53.2%), (42.6%), (21.3%), (76.2%), 36 (76.6%) , (10.6%) 624.1 ± 550.8, 626.7 ± 556.0, 546.8 ± 551.8 (p>0.05, Table 1).

Table 2. Comparison between MAST and skin prick test in three groups

	Asthma(N=59)				Asthma & AR(N=21)				AR(N=47)			
	MAST		Skin test		MAST		Skin test		MAST		Skin test	
	case	Pt(%)	case	Pt(%)	case	Pt(%)	case	Pt(%)	case	Pt(%)	case	Pt(%)
Pollen	56	19(32.2)	52	31(52.5)	38	9(42.8)	42	15(71.4)	43	20(42.6)	41	19(40.4)
Animal dander	7	4(6.8)	13	10(17.0)	3	3(14.3)	13	7(33.3)	5	5(10.6)	6	6(12.8)
House dust mite	25	12(20.3)	48	33(55.9)	14	6(28.6)	22	14(66.7)	51	25(53.2)	43	27(57.4)
Mold	17	7(11.9)	27	16(27.1)	8	5(23.8)	13	8(38.1)	13	10(21.3)	23	12(25.5)

고찰

1. IgE 가 70% 이상인 경우, MAST 검사 결과 28명(78%)은 양성, 19명(38%)은 음성이었다. (4)5) 26.3%

9) IgE 가 40% 이상인 경우, MAST 검사 결과 28명(78%)은 양성, 19명(38%)은 음성이었다. (10) 70% 이상인 경우, MAST 검사 결과 28명(78%)은 양성, 19명(38%)은 음성이었다. (11)12) IgE 가 844 IU/ml 이상인 경우, MAST 검사 결과 28명(78%)은 양성, 19명(38%)은 음성이었다. (13) 30%

14)15) total IgE 가 3.00 이상인 경우, MAST 검사 결과 28명(78%)은 양성, 19명(38%)은 음성이었다. (14)16) 85%

6)7) MAST (multiple allergosorbent test) 가 2.38 이상인 경우, MAST 검사 결과 28명(78%)은 양성, 19명(38%)은 음성이었다. (8) 8) MAST 검사 결과 28명(78%)은 양성, 19명(38%)은 음성이었다. (13) 13) MAST 검사 결과 28명(78%)은 양성, 19명(38%)은 음성이었다. (14)16) 14)16)

histamine , MAST methacholine 가

가

13)

가 17 - 19)

가

요 약

가

가

, MAST

가

가

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