

## 한국인에서 심한 승모판 폐쇄부전으로 개심술을 시행한 점액성 변성 환자의 임상상

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### Clinical Characteristics of Surgically Corrected Mitral Regurgitation Due to Myxomatous Degeneration in Korea

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#### ABSTRACT

**Background and Objectives :** Although the clinical significance of mitral regurgitation (MR) due to prolapse or chordae rupture with myxomatous degeneration (MD) is increasing significantly, the clinical features of patients with MD in Korea have not been characterized. **Materials and Method :** A retrospective analysis was performed of the clinical data of 90 patients who underwent surgical correction of significant MR due to MD. Lesion sites of MD were confirmed during surgery ; anterior (A) and posterior (P) mitral leaflets were divided into lateral (A1 & P1), middle (A2 & P2), and medial segments (A3 & P3). **Results :** The mean age was  $51 \pm 14$  years and the male/female ratio was 1 ; age distribution showed a typical bimodal pattern with two peaks at the mid-thirties and the mid-fifties each. MD was confined to P leaflet in 36 (40%), A leaflet in 20 (22%), and both leaflets in 34 patients (38%). Forty-six patients (51%) showed MD in a single segment, and 37 (41%) in 2 segments ; 7 patients (8%) showed MD in more than 2 segments. In 90 patients, pathologic MD was confirmed in 139 mitral segments ; among these, P3 was the most commonly involved segment (30%), followed by A3 (17%), P2 (14%), A2 (14%), A1 (14%), and P1 (12%). Chordae rupture was observed in 71 patients (79%), and was associated with hypertension (HT). Younger patients (age <45 years, N=31) showed a lower prevalence of HT and a higher incidence of MD involving multiple segments. **Conclusion :** MD develops preferentially in the medial part of the mitral valve, and patterns of clinical presentation can change according to the age and existence of HT in selected patients with significant MR. (Korean Circulation J 2001; 31(10):1042-1048)

**KEY WORDS :** Mitral valve prolapse ; Chordae tendineae rupture ; Mitral valve insufficiency.

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## 서 론

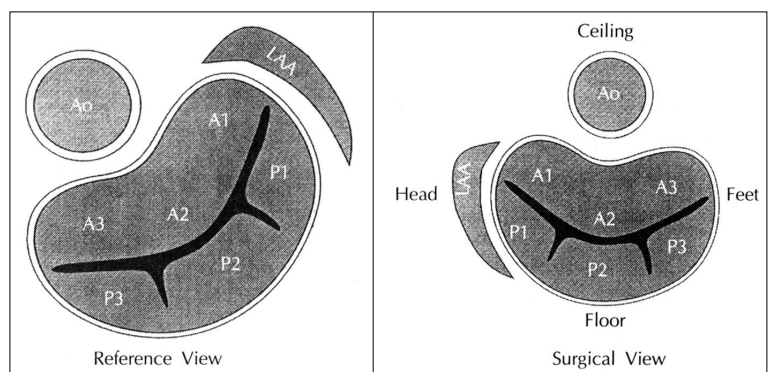
(myxomatous degeneration, MD) (mitral valve prolapse) 가 (flail mitral valve) (chordae) (prolongation) (rupture) <sup>1)2)</sup> cm<sup>2</sup> 2/4 ) MR (grade 2.0) . student t - test chi - square test Kaplan - Meier log - rank test p 0.05 . MD MR MD MR

## 결 과

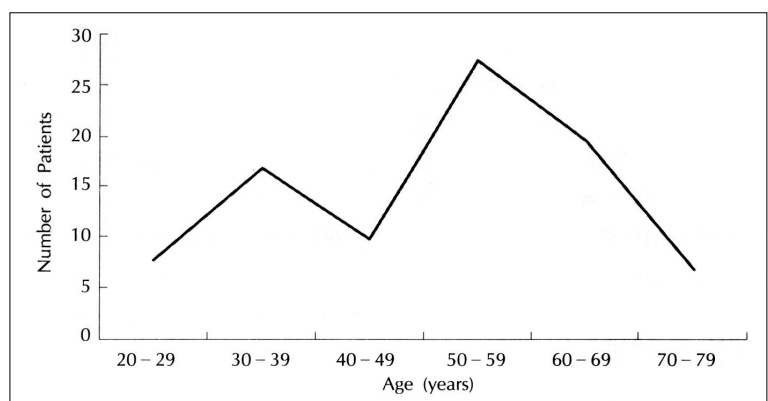
MD MR MD 90 MD , 가 45 1 : 1 51 ± 14 30 50 bimodal pattern (Fig. 2). 26 (29%) 45 45 (10% vs 39%, p=0.004, Table 1). 42%(19/45) 16%(7/45) (body mass index) 22.9 ± 3. 57 kg/m<sup>2</sup> , 23.4 ± 3.53 kg/m<sup>2</sup>, 22.4 ± 3.57 kg/m<sup>2</sup> (Table 1). 90 37 (41%) MD 가 20 (22%) 36 (40%) 가 34 (38%) 45 MD가 가 58%(18/31) 가 51%(30/59) 가 27%(16/59) (p=0.006). 90

대상 및 방법

1996 6 1999 12 MR MD 가 90 Fig. 1 <sup>8)</sup> , 3 scallops (lateral commissure) 1 (medial commissure) 3 posterior lateral scallop A1 1 2000 9



**Fig. 1.** Diagram showing 6 segments of the mitral valve (Reference 8). LAA : left atrial appendage, Ao : aorta, A1 : anterior lateral scallop, A2 : anterior middle scallop, A3 : anterior medial scallop, P1 : posterior lateral scallop, P2 : posterior middle scallop, P3 : posterior medial scallop.



**Fig. 2.** Age distribution of patients with significant mitral regurgitation due to myxomatous degeneration requiring surgery.

**Table 1.** Comparison of clinical features according to the age of patients with myxomatous degeneration and significant mitral regurgitation

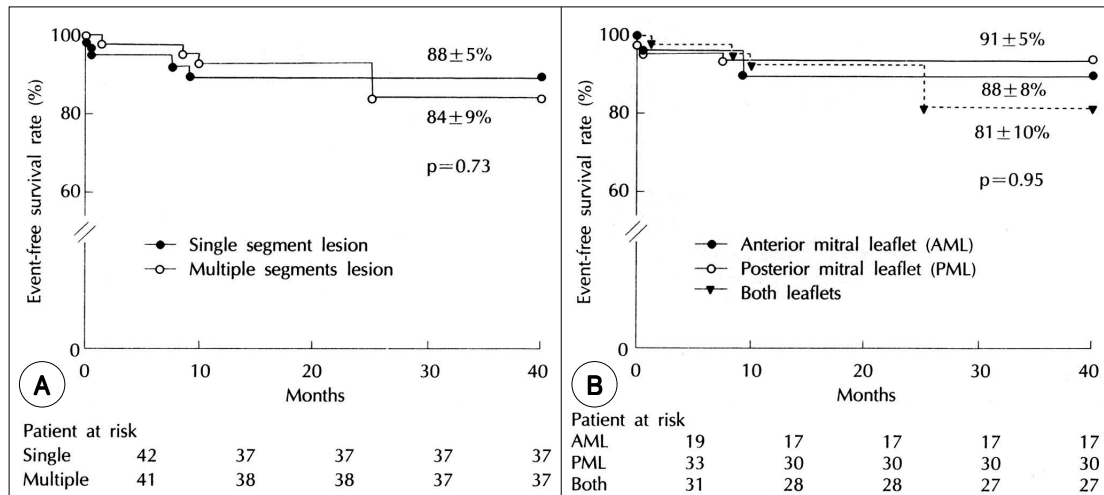
	Age <45	Age ≥45
Number	31	59
Male/Female	19/12	22/33
Body mass index	23.7 ± 3.9 kg/m <sup>2</sup>	22.6 ± 3.3 kg/m <sup>2</sup>
Atrial fibrillation	9 (29%)	28 (48%)
Hypertension*	3 (10%)	23 (39%)
Lesion sites ; Anterior/Posterior/Both*	7/6/18 (58%)	13/30 (51%)/16
Chordae rupture	21 (69%)	50 (85%)

\* : p<0.05

139, P3(29%, 41/139), A3(17%, 23/139), A2 (14%, 20/139), P2(14%, 19/139), A1(14%, 19/139), P1(12%, 17/139)

(Fig. 3).  
 46 (51%)  
 가 37 (41%), 5  
 (6%), 1 (1%) . 6  
 1 . MD가  
 가 70%(26/37) 가  
 A3 P3가 가 15  
 .  
 가 8 (22%, 8/37)  
 가 3 (8%, 3/37) .  
 90 71 (79%)  
 가  
 (34% vs 11%, p=0.047, Table 2).  
 92%





**Fig. 4.** Event-free survival rates after successful repair according to the number (A) and site (B) of myxomatous degenerative lesion.

17) 229  
(64%) 가  
MR  
25%, 61%, 48%  
가  
MR  
가  
35  
19 (54%) 가  
9  
6 (67%)  
MR  
30 11 (A1 3, A2  
2, A3 5), 11 (P1 0, P2 5, P3  
4 )  
3)  
가 45  
30 50  
bimodal pattern  
가 45  
가  
5)7) MR  
14-16)  
A3 P3

가 (anterior, A), (po-  
sterior, P) 6  
A3, P3 가  
A2, P2, A1, P1  
결 과 :  
51 ± 14 1 : 1  
45 30 50  
(18)19)  
Gore - tex  
(new chordae formation) (22%) 가 36 (40%), 20  
가 34 (38%)  
51% 46  
20 - 22) 41% 37 3  
7 (8%)  
90 139  
가 가 P3가 30% 가  
7) A3(17%), P2(14%), A2(14%),  
A1(14%), P1(12%)  
가 29% 26  
MR (42%) (16%) (p<0.05).  
가 79% 71  
45  
(n=31 )  
MR 가  
MD 92% 83  
MR 3 86 ± 5%  
결 론 :  
요 약  
가  
배경 및 목적 :  
가  
중심 단어 : ; ;  
방 법 :

90

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