

주산기 심근증의 임상적 관찰

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Clinical Observation of Peripartum Cardiomyopathy

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ABSTRACT

Background and Objectives : Peripartum cardiomyopathy (PPCM) is a rare form of heart failure affecting women between the last month of pregnancy and the first five months after delivery. The etiology and prognostic factors of PPCM remains poorly understood, although some risk factors have been described. **Subjects and Methods** : In order to characterize the features of PPCM, clinical and echocardiographic data, obtained from 19 patients who fulfilled diagnostic criteria of PPCM, from January 1996 to march 2001, were retrospectively analyzed. We divided the sample into 2 groups, which were classified according to clinical and echocardiographic improvements. (Group I ; patients who improved, Group II ; patients who did not improved, or deteriorated). **Results** : Patients with PPCM (n = 19, age : 32 ± 5 yrs, NYHA Class : II - IV, LVEF : 34.1 ± 8.8%, follow-up period : 14.2 ± 16.3 months) had a high frequencies of the following clinical factors : Anaemia (16/19, 84.2%) ; Pre-eclampsia (11/19, 57.9%) ; Multiparity (11/19, 57.9%) ; aged over 30 yrs old at delivery (11/19, 57.9%). During follow up, 10 patients improved to NYHA Class I, 8 patients failed to improve, or deteriorated, and 1 patient died due to ventricular fibrillation. Group II (n = 9, age : 31 ± 3 yrs, follow up LVEF : 38.8 ± 12.9%), as compared to Group I (n = 10, age : 33 ± 6 yrs, follow up LVEF : 56.4 ± 6.4%), had greater left ventricular end-systolic dimension (LVESD, 53.0 ± 7.7 mm vs 45.9 ± 4.8 mm ; p < 0.05). **Conclusion** : PPCM has a high rate of progression to dilated cardiomyopathy. Therefore, in pregnant women with common clinical findings of PPCM, including anemia, pre-eclampsia, multiparity and old age at delivery, the initial echocardiographic assessment for cardiac function is essential, and serial follow-up is required. (**Korean Circulation J 2002;32(6):492-497**)

KEY WORDS : Echocardiography ; Pregnancy ; Cardiomyopathy, congestive ; Risk factors.

서론

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가 .¹⁾ , , , TNF - interleukin 1 , relaxin selenium 2)

unpaired t - test , paired t - test p 0.05

결 과

대상환자의 임상적 특징

19 31.6 ± 4.6 NY-
HA Class -
34.1 ± 8.8% 14.2 ± 16.3
(1 45) 84.2%(16/
19) 가 (fetal distress) 63.
2%(12/19), 57.9%(11/19), 30
가 57.9%(11/19) (Table 1).
10 33 ± 6 9
31 ± 3

Table 1. Clinical characteristics in patients with peripartum cardiomyopathy

Anemia	16/19	84.2%
Fetal distress	12/19	63.2%
Preeclampsia	11/19	57.9%
Multiparity	11/19	57.9%
Old age (>30 yrs)	11/19	57.9%
Twin baby	4/19	21.1%
Hyperlipidemia	4/19	21.1%
URI Hx	3/19	15.8%
Ritodrine Tx	1/19	5.6%
Smoking	1/19	5.6%

URI Hx : upper respiratory infection history, Tx : treatment

Table 2. Comparison between group I and group II

	Group I (n=10)	Group II (n=9)
Age (yrs old)	33 ± 6	31 ± 3
Parity	1.5 ± 0.5	1.6 ± 0.5
Baby Wt. (kg)	3.4 ± 1.0	2.5 ± 1.7
Follow up (month)	14 ± 17	14 ± 16
Sys. BP (mmHg)	121 ± 19	121 ± 26
Dia. BP (mmHg)	81 ± 11	76 ± 11
Pulse (bpm)	90 ± 17	95 ± 28
Cr (mg/dL)	0.9 ± 0.2	1.0 ± 0.5
Hb (g/dL)	9.4 ± 1.9	10.7 ± 2.5
Hct (%)	28.9 ± 5.8	33.9 ± 5.9

Wt : weight, Sx : symptom, Sys. BP : systolic blood pressure, Dia. BP : diastolic blood pressure, Cr : creatinine, Hb : hemoglobin, Hct : hematocrit

대상 및 방법

1996 1 2001 3 가
4 가 3 2 -
D 45% M -
mode (fractional shortening) 30%
2.7 cm/m²
가 가 19 (: 31.6 ± 4.6 , NYHA
Class -)

10 ,
9 ,

통계적 분석

Statistical Package for Social Science
(SPSS 8.0)

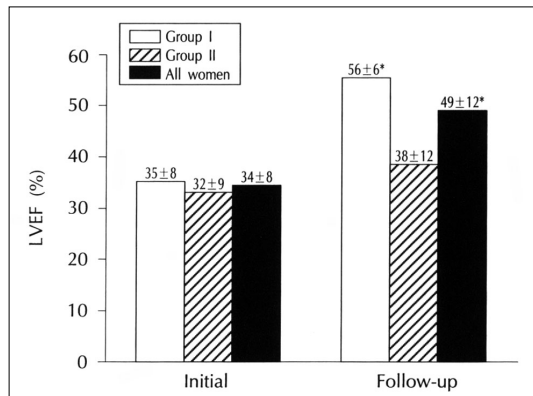


Fig. 1. Left ventricular ejection fraction in patients with peripartum cardiomyopathy. * : $p < 0.01$

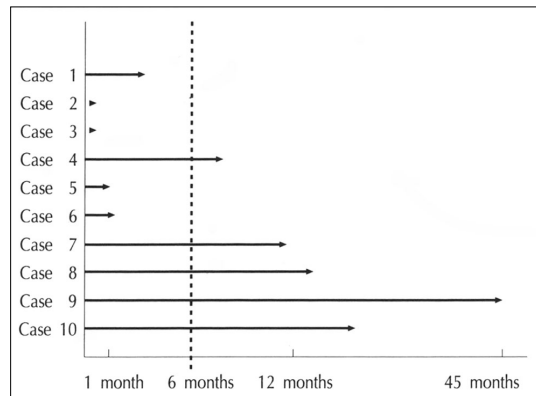


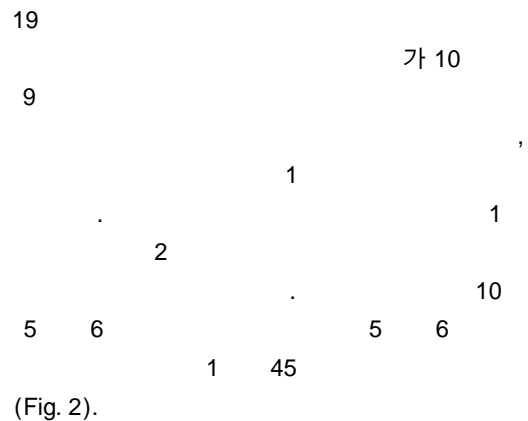
Fig. 2. Time to improved state in group I.

Table 3. Echocardiographic indices in patients with peripartum cardiomyopathy

	Group I (n=10)	Group II (n=9)
Age (yrs)	33 ± 6	31 ± 3
Initial LVEF (%)	35.3 ± 8.4	32.7 ± 9.5
LVEDD (mm)	56.9 ± 5.7	60.6 ± 6.3
LVESD (mm)*	45.9 ± 4.8	52.9 ± 7.7
LVEDV (mL)	116.9 ± 25.2	158.7 ± 73.3
LVESV (mL)	76.7 ± 20.4	102.6 ± 44.9
LAD (mm)	38 ± 5.4	37.8 ± 7.6
LVMI (g/m ²)	99.3 ± 42.4	129.5 ± 25.4

LVEF : left ventricular ejection fraction, LVEDD : left ventricular end diastolic dimension, LVESD : left ventricular end systolic dimension, LVEDV : left ventricular end diastolic volume, LVESV : left ventricular end systolic volume, LAD : left atrial dimension, LVMI : left ventricular mass index, * : $p < 0.05$

주산기 심근증환자의 추적경과



(Fig. 2).

고 찰

(Table 2).

대상환자의 심초음파소견

35.3 ± 8.4% 56.4 ± 6.4%
32.9 ± 9.5% 38.8 ± 12.9%
(Fig. 1).

(LVESD) 52.97 ± 7.73 mm 45.9 ± 4.84 mm
가 (p<0.05)
(Table 3).

19
9
가 10
1
2
5 6
1 45
10
5 6
18
Demakis
1)
3,000 4,000 1
4)
5)
18% 56%
1)3)

1997 NHLBI(the National Heart, Lung, and Blood Institute) Workshop

, ,
 2)
 akis 1)
 Dem-
 2 - D
 45% M -
 mode (fractional shortening) 30%
 2.7 cm/m²
 6)
 ,
 , 30
 ,
 ,
 1)
 가
 dehydropyridine
 19) 2
 20) 35%
 가 21)
 가
 2
 가
 22)23)
 24)
 9)10)
 가
 11)
 가
 6 1
 가
 10% 가
 45% 가
 26%
 12)
 28% 가
 18% 56%
 10%
 12)13)
 26)
 14)
 TNF - interleukin 1
 selenium 18)
 , 16) relaxin 15)
 17)
 가
 가
 가 10 9

가

2)27)

가

가

가

가

방 법 :

1996 1 2001 3 가

44

28)

가 가 19

21%

44%

가

19%

가

(contractile reserve)

29)

가

가

가

9%, 30

결 과 :

19 31.6 ± 4.6 NYHA

Class - 14.2 ±

16.3 84.2% 가

가 63.2%, 57.

가 57.9%

10 9

35.3 ± 8.4%

56.4 ± 6.4%

가

52.97 ± 7.73

mm 45.9 ± 4.84 mm

가 10

9

가

1

19

1 2

요 약

배경 및 목적 :

5 5 6 10 5 6 1 45

결 론 :

5

가
가

중심 단어 : ; ; ;

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