

plasma filtration synchronized cyclophosphamide 1

- , *

. . * . *

* . . .

SLE 1 plasma filtration synchronized
cyclophosphamide 가

(Systemic lupus erythematosus:

SLE)

가

1).

가

: , 33

1).

: ,

SLE

: 33 2

1996 9 3

1). SLE

15

SLE

4

: 130/70 mmHg,
38.9 , 80 / , 20 / .

(plasmapheresis)

SLE

가

가

2).

: 8.1g/dl,
24.0% , 3000/mm³ 800/mm³ (
73% , 12% , 3%), reticulocyte count
0.5% anisocytosis, poikilo-
cytosis, tear drop cell, eliptocyte, fragmented red blood
cell, leukopenia

50%

가

가

3-5).

가

hypocellular marrow (<20%) (Fig. 1)

negative feedback effect

7).

6).

10.2mg/ , 0.8mg/dl,
calcium 7.0mg/dl, inorganic phosphorus 2.8mg/dl,
4.9g/dl, 2.2g/dl, ALT/AST 41/117 U/L
Fe 48ug/dl, TIBC 151ug/dl .

: 1998 4 28
: 1998 11 24

Table 1. laboratory findings of hematologic and renal parameters

	96.9.3	96.11.11	96.12.16	97.3.5	97.6.11	97.11.5	98.3.2	98.6.23
Hb(g/dl)	8.1	6.3	10.4	11.0	11.1	11.6		12.0
WBC (/mm ³)	800	5100	8400	8500	7700	7700		6300
Plt (/mm ³)	3k	16k	113k	222k	195k	203k		230k
Uri.prot(mg/day)	1715	7250	1427	635	74		63	

*Plasma filtraton and synchronized cyclophosphamide therapy was done from 21 November 1996 to 24 November 1996.

Table 2. laboratory findings of immunologic parameters

	96.9.	96.11	96.12	97.3	97.6	97.11	98.5
IgG (916- 1796mg/dl)	1090	1300	447	618	687	824	968
IgA(93- 365mg/dl)	188	262	98	84	89	119	148
IgM(36- 200mg/dl)	57	75	32		83	92	95
C3(65- 125mg/dl)	25	23		100	75	71	76
C4(12- 43mg/dl)	< 9.0	< 9.0	< 9.0	20	13	13	14
ANA	1:2560	1:2560	1:2560	1:80	1:320	1:160	1:160
antiDNA	1:160			1:40	1:10	1:40	

*Plasma filtration and synchronized cyclophosphamide therapy was done from 21 November 1996 to 24 November 1996.

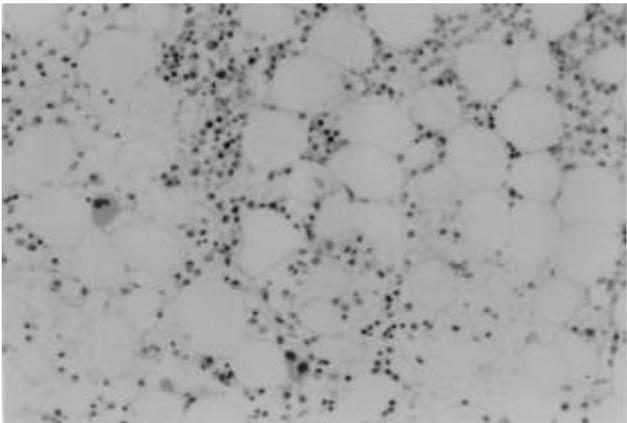


Fig. 1. The bone marrow biopsy showed a hypocellular marrow (cellularity < 20%).

(ANA) 1:2560
 (homogenous pattern) , DNA
 1:160 , IgG 1090mg
 /dl, IgA 188mg/dl, IgM 57mg/dl
 C3 25mg/dl, C4 < 9mg/dl
 14mm/hr
 (3+) 24
 1715mg/day
 pulse plasmapheresis cyclophos-
 phamide 2 filtration (60ml/kg × 3day) plasma
 filtration

2
 6.3g/dl,
 20.7% , 1600/mm³, 3000/mm³
 12.3mg/dl,
 0.8mg/dl, calcium 7.9mg/dl, inorganic phosphorus
 4.5mg/dl, 5.8g/dl, 2.2g/dl, ALT/AST
 33/18 U/L, 224mg/dl, PT/PTT 10sec/
 35sec . ANA 1:2560 (homogenous),
 anti-DNA 1:160 , IgG 1330mg/dl, IgA 262mg/dl,
 IgM 75mg/dl, Anti-Sm , Ro , La , Coombs'
 test (direct & indirect) , anti-platelet antibody
 , platelet-associated IgG , antiphospholipid
 antibody . 24
 7250mg/day, creatine 76.0ml/min/1.73m²
 : 3
 (prednisolone 60mg/day)
 pulse (methylprednisolone
 1.0g iv × 3day)
 1 plasma
 filtration (60ml/kg × 3day) plasma filtration

synchronized cyclophosphamide therapy
 (12mg/kg × 3day) . 7).
 (60mg/day) 1 1 virus, chemicals, radiation, ,
 12 mesna cyclophosphamide 1g (:Fanconi's anemia)
 , in vitro
 DNA 가 7,9.
 가 24 가
 . (Table 2, 3) 가
 98 3 20 98 6 23 .
 CBC 24hr urine protein 7).
 . antithymocyte globulin cyclophosphamide
 cytoxan
 pulse therapy 7).
 SLE 가 SLE
 Stricker 10) 2
 가 SLE androgen(oxymethalone)
 1). Sumimoto
 가 6 SLE
 T B ,
 inadequate 8). Brooks'
 regulation of hyperactivity 9)
 1).
 . SLE
 가 plasma filtration cyclophosphamide pulse
 therapy synchronization SLE
 가 11).
 Coombs' test Euler , SLE
 14 8
 1). 5.6 가 SLE
 가
 1). 12). 가
 8). , 가
 erythroid, feedback mechanism compensatory
 lymphocyte activation 가
 granulocytic, megakaryocytic cell
 pancytopenia가 7). cyclophosphamide
 12).
 Plasma filtration synchronized cyclophos-
 phamide

double-blind placebo-controlled multicenter trial
 13).
 SLE
 steroid
 SLE
 plasma filtration synchronized cyclophosphamide
 SLE
 가 SLE
 SLE 1
 . 33
 SLE
 plasma
 filtration synchronized cyclophosphamide
 1 cyclophosphamide
 plasma
 filtration synchronized cyclophosphamide
 SLE

= Abstract =

**Plasmafiltration and Synchronized
 cyclophosphamide therapy in SLE
 with aplastic anemia**

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Systemic lupus erythematosus(SLE) is a multisystemic autoimmune disease. In rare case, aplastic anemia can develop as a complication of SLE. We report a case of SLE patient with aplastic anemia and nephrotic syndrome. A 33-year-old woman was admitted because of gum bleeding. After laboratory work up including bone marrow biopsy study, she was diagnosed as SLE with aplastic anemia and nephrotic syndrome. The patient was initially treated with high dose steroid pulse therapy. However the patient did not responded to high dose steroid treatment. We treated the patient with plasma filtration and synchronized cyclophosphamide therapy followed by monthly intravenous cyclophosphamide treatment. Complete clinical remission of hematologic and renal complications was achieved in this patient. We suggest that plasma filtration and synchronized cyclophosphamide therapy might be one of effective treatment modality in the management of severe SLE patient.

Key Words : aplastic anemia, systemic lupus erythematosus, plasmafiltration, cyclophosphamide, nephrotic syndrome

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