

원발성 중추신경계 임파종의 임상적 특징과 예후인자에 대한 연구

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= Abstract =

Primary Central Nervous System Lymphoma : Clinical Analysis and Prognostic Factors

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Objective : The incidence of primary CNS lymphoma(PCNSL) has been increasing recently. The purpose of this study is to establish prognostic factors and treatment options for PCNSL.

Methods : Thirty - one PCNSL patients were treated in our institute between 1985 and 1997. All patients were histologically confirmed via stereotactic biopsy or open biopsy. The authors retrospectively analyzed clinical characteristics of PCNSL and prognostic factors, including histological cell types, immunohistological cell types and treatment options of PCNSL. Our data were statistically analyzed using Kaplan Meier survival curve and multivariate ANOVA test.

Results : The clinical and radiological characteristics of PCNSL were resembled to those of other reports. The most common histological subtype was diffuse large cell type(55.5%). In immunohistological study, the incidence of T - cell lymphoma(35.7%) was very higher than that of others. The radiotherapy could prolonged patients' survival($p = 0.021$). One - year and 3 - year survival rate of PCNSL were 66.9% and 45.9%, respectively. One - year survival rate of B cell and T cell lymphoma were 72.7% and 50.0%, respectively. The patients with B - cell lymphoma showed better prognosis than patients with T - cell lymphoma($p = 0.049$).

Conclusion : On the basis of our data, active radiotherapy could prolong patients' survival. the T - cell lymphoma revealed higher incidence than those of other reports and had poor prognosis than that of B cell lymphoma.

KEY WORDS : Primary CNS lymphoma · B cell lymphoma of PCNSL · T cell lymphoma of PCNSL · Prognosis · Mean survival time.

서 론

가 18 3 가

(Primary Central Nervous System Lymphoma : PCNSL)

가 (59 100%), (leptomeninges)

0.85 (methotrexate)

2.0% (5)25)

PCNSL

85 94 9 T - cell B - cell

가 3)

Tomlinson T - cell B - cell 70 가 10
²⁷⁾(95.5% Vs 4.5%).
 31
 (Cell subtype)

대상 및 연구 방법

1985 1 1997 12
 45 31 PCNSL (35.5%)
 (Table 1).
 PCNSL 14 (29/31, 93.5%) 가
 31 17
 14
 T
 , Kaplan Meier 1
 3 , ANOVA multivariate
 test 가

결 과

1. 임상적 특징

1.82 : 1(20 : 11)
 17 72 47.5
 , 30 50
 1 100 23.4
 , 13 (41.9%) 가
 가 8
 (25.8%), 5 (16.1%),
 가 5 (16.1%)
 Karnofsky scale 70 100 가 21

Table 1. Clinical features of the 31 patients with PCNSL

Sex(Numbers)	M : 20, F : 11
Age(Years)	Range : 17 - 71 Mean : 47.5
Follow-up(Months)	Range : 1 - 100 Mean : 23.4

2. 방사선학적 종양의 특성

31 27 (87.1%)
 2
 가 1
 11
 (35.5%)
 (29/31, 93.5%) 가
 3. 병리 조직학적 소견
 NCI Working Formulation Classi -
 fication
 diffuse large cell type 13
 가 , diffuse small cell type 3
 (Table 2). 17
 9 가 B - cell , 5 가 T - cell (29.4%)
 3 가
 T - cell

4. 치료 방법과 치료에 대한 반응

가 10 , 가 1 ,
 가 15 . 5
 가
 (whole brain field) 4080
 cGy 5800cGy 4523cGy
 3 3800cGy

Table 2. Histologic findings of PCNSL

Light Microscope classification	Number of patient
Diffuse large cell	13
Diffuse small cell	3
Diffuse mixed	3
Small cell lymphocytic	1
Anaplastic	1
Unclassified	10

Table 3. Survival time & rate*

	Mean survival(Mo.)	1 Yr. surv. rate(%)	3 Yr. surv. rate(%)
Total(n : 31)	23.4	53.8	15.4
Treated group(n : 26)**	25.0	66.9	45.9
B-cell subtype(n : 9)	17.0	72.7	53.9
T-cell subtype(n : 5)	8.4	50.0	25.0
Total(n : 31)	23.4	53.8	15.4

* : 10/31 ; at present, survived ** : Treated by any modality

16 10 DHAP regimen (cisplatin, dexamethasone, AraC) , 3 M-BA-COP regimen(methotrexate, bleomycin, adriamycin, cytoxan, vincristine, prednisolone) , 3 PVC regimen(prednisolone, vincristine, cytoxan)

21 (complete response) , 5 (16.1%) (partial response) , 5 (16.1%) (Progressive disease)

5. 재발까지의 기간과 재발시의 병소 위치

26 19 73% 13.9 14 , 10 4 5

6. Kaplan-Meier 생존 곡선과 생존율

1 100 , 23.4 31 21 10 가 . 1 66.9%, 3 45.9% 23.4 . B - cell 1 72.7%, 3 53.0% T - cell 1 50.0%, 3 25.0% (Table 3,

Fig. 1).

Karnofsky score, multivariated ANOVA test

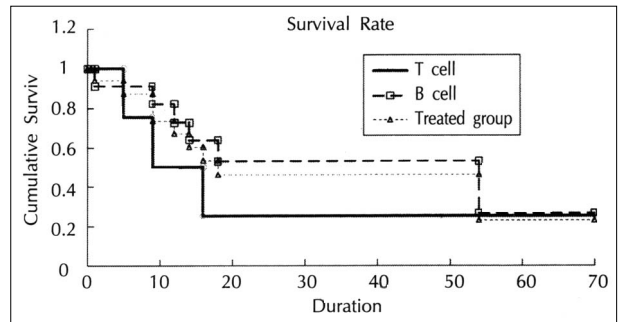


Fig. 1. Kaplan-Meier survival curves of patients with PCNSL.

Table 4. Factors relating to survival time.

Prognostic factor	P value
K-score(70 - 100)	0.066
Duration of symptoms(<6 months)	0.654
Multiplicity of the lesion	0.066
Resection of lesion	0.781
Radiotherapy	0.021
Chemotherapy	0.059
Cell type(L.M.)	0.654

Karnofsky score

가 (Table 4).

고 찰

가 가 1.5 15)16) methotr - exate 가 3)6)22)23) 19)20)21) 가 (59 100%), (leptomeninges) 가 4)8)12) 가 9)10)11)

1)2)7)13)14)15), PCNSL 20% PCNSL 가

19)26) 가 가

9)10) 가 T - cell

가 B - cell

가

T1WI , Gd 48 PCNSL cell lysis가 7)

T2WI 가 PCNSL

26)29) , 가

CT, MRI PCNSL

가 가 35.5% 가 (gliosis)

가 15)16)19)26)

PCNSL (perivascular space) (perivascular cuffing)¹⁵⁾ PC - NSL PCNSL

15) Working Formulation Classification PCNSL intermediate diffuse large cell PCNSL 가 가

high grade subtype 21 13 (61.9%) 가 PCNSL

가 50 72% 27) 22)23)24)

diffuse large cell type 가

PCNSL 가 Radiation - Therapy Oncology Group²²⁾

B whole brain 4000cGy. 2000cGy

T - cell PCNSL 1990 60 methotrexate

5 가 T - cell

cell PCNSL 가 가 3)18)

Tomlinson PCNSL 89 66 가

63 (95.5%) B - cell 27)

3 (4.5%) T - cell 가 가

17 가 K - score가 , 가

5 (29.4%)가 T - cell 17)27)

가 T - cell PCNSL

14
13.9

결론

1985 1997

- 1) T
- 2) T
- 3) PCNSL

PCNSL

PCNSL

- : 2000 7 8
- : 2000 11 14
- : 463 - 712

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