

외상성 뇌손상 아동의 신경정신과적 후유증 평가

NEUROPSYCHIATRIC SEQUELAE AND ITS EVALUATION IN CHILDREN
AND ADOLESCENTS WITH TRAUMATIC BRAIN INJURY안정숙*[†] · 김혜경* · 방형석* · 박광수* · 왕미란* · 민성호* · 박기창*Joung-Sook Ahn, M.D.,*[†] Haegyong Kim, M.D.,* Hyung-Suk Bhang, M.D.,*
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가 가 가 가 가 (5 14)
GCS
, EEG, MRI,
1) 가
2) (p<0.01).
3) (p<0.05), (p<0.05)
4) (p<0.05).
5) (p<0.05), 가 (p<0.05)
6) GCS 가 가 (p<0.05). 42 25
가 가 (p<0.05).
7) 25 가 22
(p<0.05).

중심 단어 : 가.

서 론

()¹⁾, 가 가
가

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2)3),
 ington Letemendia⁵⁾
 가

6 8
 4) . Harr -

2. 자료 수집 및 분류
 가

90%
 6),
 7)

가

가

Kraus⁶⁾

6
 6

Glasgow Coma Scale(GCS)⁸⁾ 가

가 가? 2)
 3) 가
 가,

:1)
 가 가?

3. 통계처리
 GCS (15
 13) - (12 3)
 2 가
 5 3

연구 방법

1. 연구대상

6
 1998 12
 5 14 71
 가

1995 1
 가가
 가

independent t - test
 가
 Pearson correlation²
 independent t - test
 가
 SPSS 8.0 for wind -
 p<0.05

19 결과

4 ,
 1 47

1. 사회인구학적 특성
 47 가 33 , 14

8 (8.30 ± 2.34) ($\chi^2 = 4.924$,
 df = 1, p = 0.026).
 가 17.85 ± 8.42(6
 43) .23 24 - 고 찰

(Table 1).

2. 신경정신과적 후유증의 빈도 및 뇌손상 정도에 따른 차이

1. 뇌손상 정도에 따라 증상의 차이가 있는가?

9) 2)10)

가
 가
 가
 가

가 (Table 2).

3. 신경정신과적 후유증에 관련된 인자들 (Table 3).

1)

(p < 0.01).

2)

(p < 0.05),

GCS 가

(p < 0.05)

(p = 0.085)

가

10)

90%

6)

49%

3)

가 (p = 0.063)

(p < 0.05),

4)

가 (p < 0.05)

(p < 0.05),

가

4. 심리검사가 인지증상과 정서증상을 반영·확인하는가?

2. 뇌손상 정도 이외에 후유증상에 영향을 미치는 다른 인자가 있는가?

1) 인지증상

GCS 가

가 (p < 0.05) (Table 4).

42 25

가 (Table 5).

가 (t = -2.195,

df = 45, p = 0.033).

1) 인지증상

Max 11)

2

가
 가 , 가

2) 정서증상

25

22 (Table 5).

가 dia⁵⁾가 8

Harrington Letemen -

가

가

가

2) 행동증상
 Fletcher ¹²⁾ 45
 , 6 , 12 3

CBCL(Child Behavior
 Checklist)
 Max Dunisch³⁾

가

4) 신체증상
 Deb ¹⁷⁾

75%가 가
 . Masson

13)
 7

18) 231

가 5 (44 54%),
 (26 37%)

GCS

가

19)

phenobarbital

3) 정서증상
 Warden ¹⁴⁾ 가 47

14%

가

20 15)
 13)20)

15

3. 심리검사가 인지증상과 내재화 행동증상을 반영
 확인하는가?

16)

가 가 가

가 21) 가 88%

1) 인지증상

26) 가

51% 가 가

가 가 가 가

Suhr 22) 가 가 가 가 ()

가, 80%가 가

가 가 가 가

Cahn Gould 23) 가 가 가 가

가 (personality regu -

lation), 가 가 가 가

가 25 가 가

가 50% 가 가

24) 6 가 가

2) 정서증상

Spatt 25) 6 가 가

가, 가

monitor 가 가 가 가

가 가 가 가

가 .

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NEUROPSYCHIATRIC SEQUELAE AND ITS EVALUATION IN CHILDREN AND ADOLESCENTS WITH TRAUMATIC BRAIN INJURY

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Objective : This study is designed to get clinical guidelines for management of children with TBI by examining neuropsychiatric sequelae of TBI, determining whether the severity of TBI, type of treatment, and environmental factors are related to those sequelae, and defining the adequacy of public psychological tests as evaluating tools for them.

Method : This is chart review of 47 children, aged 5 to 14 years, referred to a psychiatric outpatient clinic for neuropsychiatric evaluation at least 6 months after TBI. Data on the initial GCS score, associated injury, treatment type, and duration of hospital stay are obtained from medical records. EEG, MRI, intelligent test, and several psychological tests are administered at the point of assessment.

Results : 1) Cognitive symptoms outnumber externalizing behavioral, emotional, and somatic symptoms, with no significant differences of frequencies of those 4 categorical symptoms between mild injury group and moderate to severe group. 2) Children treated with non-surgical method ($p < 0.01$) complain more cognitive symptoms than the others. 3) Behavioral symptoms are related to younger age ($p < 0.05$), and to anticonvulsant medication ($p < 0.05$). 4) Children with associated injury complain emotional symptoms more frequently ($p < 0.05$). 5) More somatic symptoms are presented by children with no medication ($p < 0.05$), and with higher I.Q. ($p < 0.05$). 6) Low I.Q. is correlated to low GCS score ($p < 0.05$). Cognitive impairment is confirmed in 25 in 42 children complaining cognitive symptoms though I.Q. test and BGT, whose hospital stay is longer than the others ($p < 0.05$). 7) emotional disturbance is confirmed in 22 in 25 children showing emotional problems through psychological tests, who complain cognitive symptoms more frequently ($p < 0.05$).

Conclusion : This findings suggest that even mild TBI children need to be followed-up and treated as complaining neuropsychiatric symptoms over 6 months after injury, and shorter hospital stay is recommended for cognitive and emotional status of children, and for better evaluation of neuropsychiatric sequelae of TBI, more specific tests should be included in neuropsychological test tools.

KEY WORDS : Traumatic brain injury · Children · Sequelae · Evaluation.