

성인 정신분열병 환자에서 손톱주름 총 시도(叢 視度) (Nailfold Plexus Visibility)와 임상 변인과의 관계*

강대엽**† · 장희열** · 강성숙**

Relationships between Nailfold Plexus Visibility and Clinical Variables in Adult Schizophrenics*

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ABSTRACT

Objectives : There have been several evidences that the central nervous system defect is one of the etiologic factors in schizophrenia and high nailfold plexus visibility can reflect these defects indirectly. These are particularly related to the negative symptoms of schizophrenia. In this study, we examined the relationship between nailfold plexus visibility and various clinical variables in schizophrenia.

Methods : Forty patients(20 males, 20 females) satisfying the DSM-IV criteria for schizophrenia and forty normal controls(20 males, 20 females) were measured for Plexus Visualization Score (PVS) by using capillary microscopic examination. We used Positive and Negative Syndrome Scale(PANSS), Ullmann-Giovannoni Process-Reactive Questi-onnaire(PRQ), Phillips Premorbid Adjustment Scale(PAS), Continuous Performance Test, and Backward Masking for psychopathology and clinical variables.

Results : There was no significant relationship between schizophrenic subjects and normal controls in PVS. PVS was correlated with PANSS positively except negative symptom subscore. PVS was correlated with PRQ score negatively, and with PAS score positively.

Conclusions : This study shows high PVS are associated with more severe psychotic symptoms and with clinical variables, such as disease process and premorbid adjustment, in some schizophrenics.

KEY WORDS : Schizophrenia · Plexus visualization score · Negative symptoms.

서론 (nailfold) 가 . 가
(subpapillary plexus) 6% , 25 75%
(Maricq 1965).
(叢 視度) (plexus visibility) 1948 20
(Iacono 1985 ; Poole 1991). Maricq
(1963) 10 가 가
(可視) (plexus visualization score ; PVS)
1998 41
Yong-In Mental Hospital, Yongin, Kyunggi-do, Korea
† : , 449 - 910 4
) (0331) 288 - 0270 ·) (0331) 288 - 0370

cutaneous recovery from stress : Maricq Edlberg 1975 ;
 Maricq Weinrich 1980)
 가 .
 (visibility)
 (Norris Chown -
 ing 1964).

4 0.5 가
 2 3 2.5 .
 0 40 .
 ; 4 = , , 3 =
 , 2 = , ,
 1 = , 가 , 0
 = .
 Maricq(1963)
 40 PVS 10
 PVS 10

연구대상 및 방법

1. 연구대상

Diagnostic and Statistical Manual of
 Mental Disorders Fourth Edition(DSM - : American Ps -
 ychiatric Association, 1994)

가 가
 40 (20 , 20
)
 , 4
 가 , 가
 20
 1 .

2. 연구방법

1) 모세관 현미경 검사 방법

(視度)
 B (ty -
 pe B immersion oil) 12
 가 Maricq 가 (scale of plexus vis -
 ualization) (Maricq 1970).
 (proximal edge) (netlike
 venous structure) , 가 (plexus visibility score ;
 PVS) 가 (可視) (lateral and proximal
 extent of visible plexus) 가
 10 가 , 가 0

2) 임상 변인 및 증상의 평가

가 ,
 가 Ullmann - Giovannoni Se -
 lf - Report Process - Reactive (Ullmann Giovannoni
 1964) , 24 가
 가 Phillips (Abbrevi -
 ated Phillips Premorbid Adjustment Scale : Harris 1975)
 2 , 5 , 가
 가
 Positive and Negative Syndrome Scale(PANSS : Kay
 1987) . PANSS 7 , 7 ,
 16 7
 가 가

(Backward Masking) (CPT : Continuous
 Performance Test)

3) 통계분석

가 , 가 CPT
 (commit error) log 10 (log 10 tranfor -
 mation) . PVS
 PVS (PVS Stud -
 ents's t - test .
 PVS PVS ²test
 PVS, PANSS ,
 (Pearson's correlation coefficient) . ,

가 (Spe -
arman's correlation coefficient)
SPSS(Statistical Package for the Social Science)
6.1 for the Macintosh 0.05

Table 1. Demographic data

	Schizophrenic subjects mean ± SD* (range)	Normal controls mean ± SD* (range)
Age	35.6 ± 9.0(18 - 60)	31.3 ± 6.0(20 - 56)
Sex : Male	20	20
Female	20	20
Age of first symptom	23.0 ± 7.1 (15 - 50)	
Age of first hospitalization	24.3 ± 7.1 (15 - 50)	
Number of hospitalization	4.7 ± 3.2(1 - 15)	
Chlorpromazine equivalent dose(mg)	948.3 ± 705.6 (100 - 2500)	
Education (year)	12.0 ± 2.4(6 - 16)	
PVS** Score	6.2 ± 5.9(0 - 24)	5.2 ± 6.0(0 - 22.5)

*SD : standard deviation, **PVS : Plexus Visualization Score

Table 2. Comparisons between schizophrenic subjects and normal controls in Plexus Visualization Score (PVS)

	Schizophrenic subjects(N=40) mean ± SD*	Normal controls(N=40) mean ± SD*	t**	p
PVS***	6.2 ± 5.9	5.2 ± 6.0	-0.67	0.252
	Subjects(%)	controls(%)	²	p
High PVS(≥ 10)	9(22.5)	8(20.0)	2.90	0.088
Normal PVS(<10)	31(77.5)	32(80.0)		

*SD : standard deviation, **t : t value

***PVS : Plexus Visualization Score

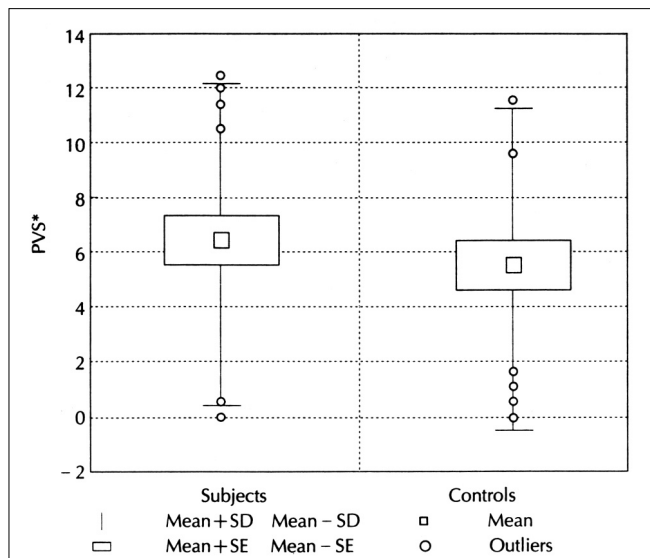


Fig. 1. Plexus Visualization Score(PVS) in schizophrenic subjects and normal controls($t = -0.67, p = 0.252$). PVS* : Plexus Visualization Score
Box Plot Mean standard errors calculated using pooled variance.

결 과

(20 , 20) 35.6 ± 9.0(18 60) , (20 , 20) 31.3 ± 6.0(20 56) . 23.0 ± 7.1 (15 50) , 가 (chl - orpromazine equivalent dose) 948.3 ± 705.6(100 2500) mg (1). PVS (6.2 ± 5.9) (5.2 ± 6.0) (t = -0.67, p = 0.252), PVS가 9(22.5%) , 8(20.0%) 가 ($\chi^2 = 2.90, p = 0.088, 2, 1$). 가 (PVS)가 PANSS (r = 0.288, p = 0.036), (r = 0.374, p = 0.009), (r = 0.296, p = 0.032), (r = 0.265, p = 0.049), CPT (r = 0.293, p = 0.041) (3, 2). , PVS (r = -0.291, p = 0.034), Ullmann - Giovannoni Self - Report Process - Reactive (r = -0.272, p = 0.045), (r = -0.375, p = 0.009) (3, 2). PVS (N=9) PVS(N=31) , (t = -1.78, p = 0.042), PANSS (t = 1.78, p = 0.042), (t = 1.70, p = 0.049) , PANSS

Table 3. Correlation of Plexus Visualization Score(PVS) and clinical variables in schizophrenic subjects

	PVS ¹⁾ (N=40)	
	Pearson's coefficient	p
Age of first symptom	-0.291	0.034*
Positive symptom score	0.374	0.009**
Negative symptom score	0.096	0.278
General symptom score	0.296	0.032*
Total PANSS ²⁾ score	0.288	0.036*
PAS ³⁾	0.265	0.049*
PRQ score ⁴⁾	-0.272	0.045*
Hit rate score of CPT ⁵⁾	-0.375	0.009**
Commit error score of CPT	0.293	0.041*
Backwad Masking score	0.049	0.388

1) PVS : Plexus Visualization Score

2) PANSS : Positive and Negative Syndrome Scale

3) PAS : Phillips Premorbid Adjustment Scale

4) PRQ score : Ullmann-Giovannoni Process-Reactive Questionnaire

5) CPT : Continuous Performance Test

*p < 0.05, **p < 0.01

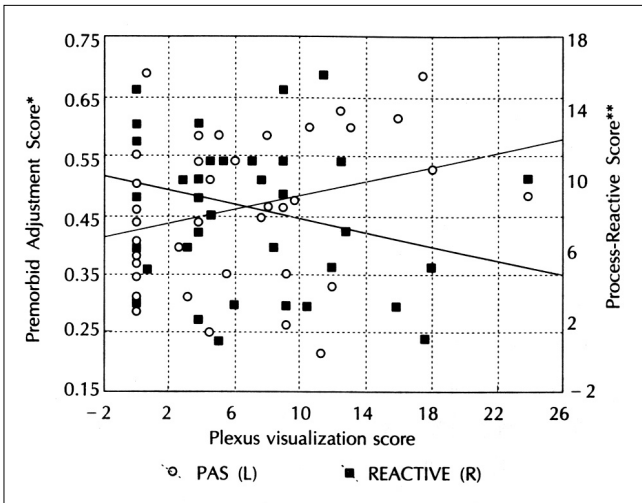


Fig. 2. Correlation of Plexus Visualization Score(PVS) with Premorbid Adjustment Score(PAS) and Process-Reactive Score(PRQ) in schizophrenic subjects(*Pearson's $r=0.265$, $p=0.049$, **Pearson's $r=-0.272$, $p=0.045$).

Table 4. Comparisons between high Plexus Visualization Score (PVS) and low PVS in clinical variables

	High PVS ¹⁾ (10)(N=9)	Low PVS (<10)(N=31)	t ²⁾	p
Age of first symptom	21.1 ± 3.5	25.2 ± 7.7	-1.78	0.042*
Positive symptom score	20.7 ± 4.4	17.5 ± 4.9	1.78	0.042*
Negative symptom score	21.4 ± 6.6	20.4 ± 5.4	0.51	0.308
General symptom score	42.1 ± 9.0	39.0 ± 7.6	1.05	0.151
Total PANSS ³⁾ score	84.2 ± 18.4	76.8 ± 15.7	1.20	0.118
PAS ⁴⁾	0.52 ± 0.16	0.44 ± 0.11	1.70	0.049*
PRQ score ⁵⁾	6.8 ± 4.8	9.0 ± 4.0	-1.39	0.086

1) PVS : Plexus Visualization Score

2) t : t value

3) PANSS : Positive and Negative Syndrome Scale

4) PAS : Phillips Premorbid Adjustment Scale

5) PRQ score : Ullmann-Giovannoni Process-Reactive Questionnaire

*p<0.05

($t=0.51$, $p=0.308$), ($t=1.05$, $p=0.151$), PANSS ($t=1.20$, $p=0.118$), Ullmann - Giovannoni Self - Report Process - Reactive ($t=-1.39$, $p=0.086$) (4).

고찰

가, PVS가 10
PVS 가
PVS가 22.5% 가
70% (Dejmal 1968 ;
Hauptmann Myerson 1948 ; Maricq 1963) 가
18 25%

(Clementz 1992 ; Maricq 1963, 1966)
PVS 가
PVS가 3 7% (Clementz 1992 ; Ma-
ricq 1963, 1966) 8 12%
20% 가
PVS 가 가
가 가
가 Clementz
(1992) PVS 가 , Buchanam
Jones(1969) 70%
가 가
PVS가 PANSS
(Alson 1965 ; Dejmal
1966 ; Maricq 1963, 1966, 1969b ; Norris Chowning
1964 ; Pokorny 1970 ; Poole 1991 ; Wertheimer
Wertheimer 1955)
가 (PVS)가
CPT
, Ullmann - Giovannoni Self -
Report Process - Reactive CPT
가
(Dejmal 1966 ; Maricq 1966 ;
Norris Chowning 1964 ; Pokorny 1970 ; Wertheimer
Wertheimer 1955), PVS 가
(Alson 1965)
. Strauss (1974)

PANSS

가 (Dworkin Lenzenweger 1984), PVS

(Andreasen Olsen 1982 ;Crow 1985), 가 PVS

가 가 (Norris 1966) 가

가 (可視) (visible plexus) 가 , PVS

PVS PVS 가

PVS 가

가 가 가 PVS

가 가 (Maricq 1969b), 가

가 (Carpenter 1985)

PVS가 가 가

(Clementz 1992 ; Maricq 1969a ; Maricq Jo - nes 1976), PVS가

가 가 PVS가 9 , 8 (Gooding Miller 1998)

가 , PVS PVS 가

lacono Clementz(1992)

Ullmann - Giovannoni Self - Report Process - Reactive 가 가

PVS , PVS PVS가

PVS PVS P50,

가 Poole (1991) 가

PVS 가

Poole (1993) PVS

가 가 가 가

요 약

DSM - 40 40

(6.2 ± 5.9) (5.2 ± 6.0)

(PVS) 가

(t = -0.67, p = 0.252), PVS

가 ($r^2 = 2.90$, p = 0.088).

PVS PANSS

PVS가 (r = -0.291, p = 0.034).

PVS가 (r = 0.265, p = 0.049).

가

(r = -0.272, p = 0.045).

PVS CPT (r = -0.375, p = 0.009), CPT

(r = 0.293, p = 0.041)

가

중심 단어 :

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