

Clozapine과 Risperidone에서 Olanzapine으로 교체 연구 : 12개월 추적연구

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Switch to Olanzapine from Clozapine or Risperidone and 12-months Follow Up

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ABSTRACT

In clinical setting, treatment - refractoriness, medication induced tardive dyskinesia and amenorrhea in chronic schizophrenia are frequently problematic. However, there are few guideline solving these problem available to clinicians.

The goal of this study was collecting clinical data on clinical effectiveness and predictors of response of switching to olanzapine.

We attempted to switch to olanzapine from risperidone and clozapine in chronic 31(risperidone 17, clozapine 14) schizophrenia and schizoaffective disorder patients suffering from sustained symptoms, weekly blood monitoring, medication induced tardive dyskinesia and amenorrhea.

Previous antipsychotics dosage was gradually decreased for 2 or 3weeks, at the same time olanzapine dosage was gradually increased. At baseline, after 1 week, after 2 weeks and after 4 weeks we checked Brief Psychiatric Rating Scale, Clinical Global Impression Scale, Simpson - Angus Rating Scale, Barnes Akathisia Rating Scale and followed up after 12 months.

Successful switch after 4 weeks was achieved in 25 patients(clozapine 9(64.2%), risperidone 16(94.1%)). Overall, mean BPRS and CGI scores increased significantly.

Successful maintenance after 12 months was achieved in 17 patients(clozapine 5(35.7%), risperidone 12(70.5%)). Overall, mean BPRS and CGI scores increased significantly too.

Switching to olanzapine from other atypical antipsychotics is recommendable in chronic schizophrenia with treatment refractoriness and drug induced side effect.

KEY WORDS : Schizophrenia · Switch · Olanzapine.

서 론

가 가 .

Chlorpromazine

(Sheitman

Lieberman 1998), 30 50%가
(Meltzer 1990).

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Clozapine

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가

(Ho 1999),

risperidone olanzapine
 and Drug Administration, USA)
 (Kasper 1998).
 Clozapine 6
 60% 가
 (Kane 1988 ; Meltzer
 1990). clozapine
 pathway) dopamine

(Henderson 1998). clozapine
 , (sialorrhea)
 ,
 , 40 50%
 (Weiss 1999 ; Miller 2000).
 olanzapine
 olanzapine
 , clozapine 가
 (Kando 1997 ;
 Sanders Mossman 1999 ; Tollefson 1997 ; Beasley
 1997 ; Beasley 1996), (neutrophil)
 (Beasley 1997 ; Gardner
 1998a ; Gardner 1998b ; Casey 1997).
 risperidone olanzapine dopamine D₂
 5-HT₂
 (Ho 1999).
 ,
 dopamine D₂
 (Bymaster 1996 ;
 가
 가 (Rabinowitz 2000).

speridone olanzapine
 .
 prolactine
 1999 ; Zuddas 2000 ; Kim 1999), risperidone
 olanzapine 가 (Gazzola
 Opler 1998).
 . Dopamine
 risperidone ,

olanzapine 가
 Birsoz 2001 ; Agarwal Kumar 2001).
 clozapine risperidone
 ,
 ,
 가
 olanz-
 apine , 12
 가 .

대상 및 방법

1. 연구대상

1999 12 2000 5
 4 (DSM -) (Ameri-
 can psychiatric Association 1994)
 18
 clozapine risperidone
 가
 31
 가 [0 6] (Brief Psychiatric Rating Scale :
 BPRS) 25 [1 7] (Cli-
 nical Global Impression : CGI) 3
 Jaeger
 (1988).

2. 연구 방법

1) 약물 교체

가
 (Kinon 2000). (Henderson
 1998 ; Kinon 2000 ; Littrell 2000) 1

(1) Risperidone olanzapine

risperidone 4mg/day
 1 risperidone 1/2 olanzapine
 5mg/day , 2 olanzapine 10mg/day,
 3 olanzapine 20mg/day
 risperidone 4mg/day
 1 risperidone 1/2 olanzapine

5mg/day , 2 olanzapine 10mg/day
 , 3
 .

34.5 ± 9.0 . 71.9% 23
 9.7 ± 4.9 . ,

(2) Clozapine olanzapine
 clozapine 300mg/day
 1 clozapine 1/2 olanzapine 5
 mg/day , 2 clozapine 1/2
 1/4 olanzapine 10mg/day
 , 3 olanzapine 20mg/day

clozapine 14 , risperidone
 17 .
 risperidone 가 .
 clozapine ,
 risperidone
 (1).

2. Olanzapine으로 교체 이유

clozapine 300mg/day
 1 clozapine 1/2 olanzapine 5
 mg/day , 2 clozapine 1/2
 1/4 olanzapine 10mg/day
 , 3 olanzapine 10mg/day

31 67.7% 21
 . 6 , 2
 가 risperidone
 (2).

3. 교체 완료 후의 효과 평가

2) 정신 병리 및 부작용의 평가
 가
 가 1 , 2 , 4 12
 가 0
 6 BPRS 1 7 CGI
 가 Barnes
 가 (Barnes Akathisia Rating Scale), Simp-
 son - Angus 가 (Simpson - Angus Rating Scale)
 , 가

4 25
 Clozapine 64.2% 9 , risperidone 94.1%
 16 . 6
 , clozapine 5 , risperidone 1 . Clozapine
 5 4
 4 1 , 1

Table 1. Demographic data of clozapine and risperidone group

	Clozapine group	Risperidone
Sex		
Male	11(78.6%)	7(41.2%)
Female*	3(21.4%)	10(58.8%)*
Age (years)	33.6 ± 9.45	35.2 ± 8.9
Diagnosis		
Schizophrenia, paranoid	7(50.0%)	16(94.1%)
Schizoaffective, bipolar type	4(28.6%)	1(5.9%)
Schizophrenia, disorganized	2(14.3%)	0
Schizophrenia, undifferentiated	1(7.1%)	0
Duration of illness (years)	11.7 ± 5.10	8.0 ± 4.13
Duration of previous medication (months)	26.6 ± (23.65)	14.4 ± 8.81

Mean ± SD, * : significant different from baseline (p < 0.05)

Table 2. Cause of switch to olanzapine

	Clozapine group	Risperidone group	Total
Treatment-resistance	13(92.8%)	8(47.1%)	21(67.7%)
Amenorrhea	0	6(35.2%)	6(19.3%)
Tardive dyskinesia	0	2(11.8%)	2(6.4%)
Other side	1(7.1%)	1(5.9%)	2(6.4%)
Total	14(100%)	17(100%)	31(100%)

연구 결과

1. 인구사회학적 특성

31 . 18 ,
 13 , 21 60

Table 3. Mean BPRS⁺ change in switch completion patients

	Baseline	1 week	2 week	4 week
Clozapine group(n=9)	31.44 ± 8.31	30.55 ± 8.97	28.88 ± 8.37	26.66 ± 4.52*
Risperidone group(n=16)	30.50 ± 8.31	29.21 ± 8.36*	28.18 ± 8.08*	27.18 ± 7.44*
Total(n=25)	30.45 ± 8.12	29.70 ± 8.42*	28.44 ± 8.02*	27.00 ± 6.44*

Mean ± S.D.
+ BPRS : Brief Psychiatric Rating Scale
* : significant different from baseline (p<0.05)

Table 4. Mean CGI⁺ change in switch completion patients

	Baseline	1 week	2 week	4week
Clozapine group(n=9)	5.33 ± 3.31	3.66 ± 0.50*	3.44 ± 0.52*	3.00 ± 0.50*
Risperidone group(n=16)	4.31 ± 0.79	3.62 ± 0.80*	3.31 ± 0.70*	3.25 ± 0.57*
Total(n=25)	4.68 ± 2.07	3.64 ± 0.70*	3.36 ± 0.63	3.16 ± 0.55*

Mean ± S.D.
+ CGI : Clinical Global Impression
* : significant different from baseline (p<0.05)

Table 5. Mean BPRS⁺ change in maintenance completion patients

	Baseline	4 week	12 months
Clozapine group(n=5)	31.44 ± 8.31	26.66 ± 4.52	26.66 ± 7.14*
Risperidone group(n=12)	30.50 ± 8.31	27.18 ± 7.44*	26.91 ± 6.68*
Total(n=17)	30.45 ± 8.12	27.00 ± 6.44*	26.83 ± 6.62*

Mean ± S.D.
+ BPRS : Brief Psychiatric Rating Scale
* : significant different from baseline (p<0.05)

Table 6. Mean CGI⁺ change in maintenance completion patients

	Baseline	4 week	12 months
Clozapine group(n=5)	5.33 ± 3.31	3.00 ± 0.50*	3.00 ± 0.63*
Risperidone group(n=12)	4.31 ± 0.79	3.25 ± 0.57*	3.00 ± 0.73*
Total(n=17)	4.68 ± 2.07	3.16 ± 0.55*	3.00 ± 0.68*

Mean ± S.D.
+ CGI : Clinical Global Impression
* : significant different from baseline (p<0.05)

1 . Risperidone
4 BPRS
30.45 ± 8.12 27.00 ± 6.44
4.68 ± 2.07, 3.16 ± 0.55
(3, 4). BPRS 2
risperidone clozapine
clozapine CGI가 BPRS

4. 교체 후 12개월 추적 시의 효과 평가
12 olanzapine
54.8% 17 . clozapine
35.7% 5 , risperidone 70.5% 12
4 olanzapine risperidone
Clozapine 4 3
, clozapine , 1
1 risperidone 3
4 1 , 1 가
가 2

Olanzapine ,
12 BPRS 30.45 ± 8.12, 27.00 ± 6.44,
26.83 ± 6.62 , CGI 4.68 ± 2.07,

3.16 ± 0.55, 3.00 ± 0.68
12
risperidone 12 clozapine 5
(5, 6).

5. 부작용 평가
Olanzapine Simpson - Angus
가 Barnes 가
13 . 2
1 clozapine
, 1 risperidone
1 clozapine
13 8
5 , clozapine 3 , risperidone
가 Barnes 가 Simpson Angus
(1, 2).

6. 예측인자 분석
가
Chi - square test 가
(p=0.070, 0.05<p<0.1)

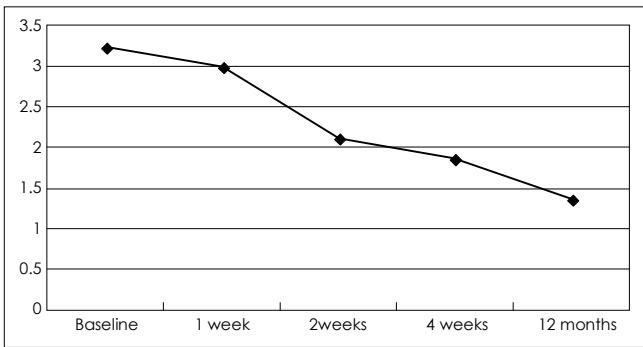


Fig. 1. Mean change of Simson-Angus Rating Scale.

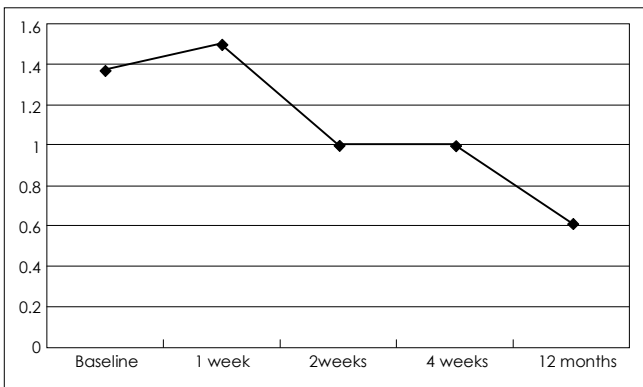


Fig. 2. Mean change of Barnes Akathisia Rating Scale.

고찰

DSM -

risperidone clozapine

가

olanzapine

olanzapine 가,

Ahmed (1998) clozapine

가

Kinon (2000)

, Kinon (2000)

clozapine

risperidone

Clozapine 14 , risperidone 17 , 31

가 , clozapine 9 (64.2%), risp-

eridone 16 (94.1%) 4

Littrell (2000) clozapine olanzapine

90% 가

64%

Littrell (2000) clozapine

BPRS CGI

, BPRS risperidone clozapine

clozapine CGI가 BPRS

Henderson (1998) Sanders

(1999) clozapine BPRS가

가

clozapine CGI

가

clozapine 가

, Littrell (2000) Henderson (1998)

clozapine

, olanzapine

가

가 가

Risperidone

1

risperidone

olana-

zapine

25

12

(naturali-

stic outcome study)

가

(Essock 1996), 가

(KN Roy 1999)

12 clozapine 5 (35.7%), risperidone

12 (70.5%)

clozapine 가

가 , risperidone

가

14 clozapine 35.7%

가 50% 7

, Henderson (1998) 8 19

42%

Risperidone olanzapine

risperidone (Rabi-

nowitz 2000).

, risperidone 17 8 (47%)

12 12 (70.5%)
risperidone
가 olanzapine
가
Simpson - Angus 가 Barnes 가
3
olanzapine 가
risperidone olanzapine clozapine
olanzapine 가
clozapine risperidone
가 olanzapine
중심 단어 :

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