

# 신경이완제 악성증후군 회복후 지속되는 조증에 Clozapine을 사용한 청소년 환자 1례\*

## A CASE OF CLOZAPINE TRIAL FOR A MANIC EPISODE SUFFERED BY AN ADOLESCENT RECOVERING FROM NEUROLEPTIC MALIGNANT SYNDROME

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요 약 : (NMS) , NMS  
 가 가 NMS , NMS  
 clozapine NMS 1995  
 11 , 1996 2 13 3 29  
 , 1998 3  
 1998 3 31 haloperidol 8mg 4  
 NMS  
 dantrolene bromocriptine 6  
 가 Thioridazine 50mg  
 21 clozapine  
 46 clozapine 350mg NMS  
 58  
 중심 단어 : Clozapine · Dantrolene.

서 론 ndrome : NMS)

(neuroleptic malignant sy - 0.02 2.4%

1998

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10 20% . 1998 3 , 2  
 1).  
 가 , . 3 23  
 가  
 NMS 가 . 1  
 NMS가 2). 가  
 . 3 27  
 risperidone clozapine 가 3 31  
 NMS가  
 3-5). NMS가  
 NMS 2. 발달력 및 가족력  
 가 . NMS 가 가 ,  
 NMS 20 , 2.6kg  
 . 1 가  
 . NMS 1 , 가  
 2 가  
 , 가 6).  
 NMS 15 , 3 가  
 가  
 NMS  
 clozapine  
 증 례  
 1. 주소 및 현병력  
 2  
 3 1995 “ 가 3  
 ; “ ” 1 1997 3  
 . 1996 2 가  
 ,  
 (1996. 2. 13 3. 29). 53 3 2  
 , 46 3 1  
 , 1 1997 3 1995  
 , 3  
 . 가  
 haloperidol 1.0mg, lithium 900mg 3. 신체이학적 검사, 심리검사 및 정신상태검사  
 2 (1998 2 1995  
 23 ) haloperidol 0.5mg, lithium 300mg . 1996 2

IQ

65( 71/ 66) .  
 1998 3 31 170cm/55Kg haloperidol 8mg(5mg /3mg  
 가 ) diazepam 12mg(5mg /7mg )  
 가 .  
 3) 입원 4일  
 가  
 “ ” “ ”  
 “ ” “ ”  
 , NMS  
 lorazepam  
 CK 가,  
 가가 (Table 1), 37.5 .  
 가 ,  
 가  
 가 7  
 가 10  
 4. 치료 및 경과  
 1) 입원 1일  
 가  
 가 1 Bromocriptine 2.5mg  
 가  
 가 4) 입원 5~6일  
 Dantrolene 20mg ,  
 bromocriptine 5mg . 6  
 가 CK  
 가 1  
 . NMS  
 37.9 가  
 chlorpromazine 25mg lorazepam 4mg  
 2) 입원 2~3일  
 5) 입원 9일  
 NMS 가 ,

**Table 1.** Lab data

	HD*1	HD 4	HD 5	HD 6	HD 7	HD 9	HD 17	HD 24		
GOT/GPT	24/11	67/24	99/32	140/37	263/76	-	504/135	367/165	44/48	29/39
CK** (IU/L)	-	3504	8540	10485	22770	30890	24737	12564	955	397
LD*** (IU/L)	-	670	-	798	673	1090	970	616	345	247
WBC (/cu mm)	9820	20200	-	22200	18800	-	18470	11200	5300	-
BUN/Cr	15/1.0	13/0.8	-	13/0.8	12/0.9	-	-	-	-	-
Serum myoglobin#			-	122	-	-	-	-	-	-
Urine myoglobin##			-	300	-	-	-	-	-	-

\*HD : hospital day

#Serum myoglobin : normal : below 50ng/ml

\*\*CK : creatine kinase

##Urine myoglobin : normal : below 7ng/ml

\*\*\*LD : lactate dehydrogenase

가

NMS

lorazepam 20 , (1) 10 , (2)

mg , 4mg

6) 입원 14일 , (3) 가

Lorazepam , (4) , (5) 2

thioridazine 10mg

lithium haloperidol

NMS가

7) 입원 18일 6)7) 가 NMS

8) 입원 21일 8)

140/70 140/100mmHg, 가

95 115 , 36.2 37.8 NMS 가

20 30%

Clozapine 12.5mg 9)

, clozapine 26 350mg NMS 가

dantrolene 10)

9) 입원 57일 dantrolene

가

10) 퇴원 이후 NMS dantrolene

1998 10 350mg 가 , dantrolene

가 clozapine

가

가 NMS

NMS 가 가

1998 12 14 325mg Rosebush 11) NMS

가

가 가

가 Rosebush 11) NMS

가가 NMS

고 찰 2

lithium

12) Weller Kornhuber<sup>13)</sup> NMS

NMS clozapine

9 clozapine  
 . 9 NMS  
 1 8  
 . Rosebush <sup>11)</sup> NMS  
 2 NMS 2  
 , 가  
 CK 가 15  
 clozapine . Clozapine  
 NMS가  
 ,  
 clozapine . Clozapine  
 , 5 가  
 . Weller Kornhuber<sup>13)</sup> NMS  
 clozapine  
 , clozapine NMS  
 3)14)

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Neuroleptic malignant syndrome(NMS) is an acute, potentially fatal, idiosyncratic reaction to neuroleptic medication. Early recognition and intensive care are crucial. An important issue is whether NMS will recur after initial recovery and subsequent use of neuroleptic medication. The authors presented with a male adolescent who had suffered a bipolar disorder manic episode and been taking clozapine after recovering from MNS. He had been admitted into a psychiatric ward once before and similarly diagnosed. On the second admission, he showed muscle rigidity, autonomic instability, mild fever, severe diaphoresis, and altered mental status on the fourth hospital day following a haloperidol injection. He was diagnosed with NMS, according to the clinical signs and laboratory data. After the use of antipsychotics was discontinued, he was moved to intensive care unit and given dantrolene. His condition began to improve about 48 hours after the onset of NMS. Due to manic behavior, he returned to the psychiatric ward. On the 21 st hospital day, clozapine was administered to counter the manic symptoms. The final dose was 350mg and showed good remission signs without further recurrence of NMS.

**KEY WORDS** : Neuroleptic malignant syndrome · Manic · Clozapine · Dantrolene.