A 4-Week, Double-Blind Comparison of Olanzapine with Haloperidol in the Treatment of Amphetamine Psychosis

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Objective: *To compare the efficacy and tolerability of olanzapines and haloperidol in treating patients with amphetamine psychosis.*

Material and Method: *Fifty-eight patients experiencing episode of amphetamine psychosis were randomly assigned to olanzapine (N=29) or haloperidol (N=29) in 1:1 (olanzapine: haloperidol) ratio. All patients started with 5-10 mg/day of the study drug; after each 7-day period, the study drug could be adjusted in 5-mg increments or decrements within the allowed dose range of 5-20 mg/day during the 4-week double-blind period.*

Results: *Clinical response was seen in both treatment groups since the first week. Ninety three percent of the olanzapine patients (N=27 of 29) and 79.3% of the haloperidol patients (N=23 of 27) were clinically improved at endpoint. These differences were not statistically significant (p=0.25). The Simpson-Angus total score change from baseline to endpoint reflected no extrapyramidal symptoms among the olanzapine-treated patients (median=0.0, range=0.0). In contrast, worsening occurred among the haloperidol-treated patients (median=0.2, range=0.0-3.1). The differences of mean change in Simpson Angus Scale significantly favored olanzapine (p<0.01). Change to endpoint on the Barnes Akathisia Scale showed that olanzapine-treated patients' scores were close to the baseline (median=0.0, range=-1.0-0.0), whereas haloperidol-treated patients' scores worsened from the baseline (median=0.0, range=-1.0-3.0). This difference was statistically significant (p=0.02).*

Conclusion: *Both olanzapine and haloperidol were efficacious in the treatment of patients with amphetamine psychosis. Olanzapine was superior to conventional neuroleptic haloperidol in treatment safety with lower frequency and severity of extrapyramidal symptoms.*

Keywords: *Amphetamine psychosis, Treatment, Olanzapine, Haloperidol, Efficacy, Tolerability*

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Amphetamines are the most widely used illicit drugs, second only to cannabis, in Great Britain, Australia, and several countries of Western

Europe. In the United States, lifetime and current cocaine use still exceeds the nonmedical use of amphetamines, but in some parts of the country methamphetamine use increased significantly in the 1990s and became a matter for serious concern[1]. In the Kingdom of Thailand, the primary drug abuse problem for centuries was opium dependency. In the late 1990's the abuse of amphetamine type stimulants superceded the heroin problem and now accounts for nearly 70 percent of all addictions[2]. The increase in methamphetamine addiction in Thailand represents a dramatic shift. Similar but fewer dramatic trends, especially among young adults, also are being reported throughout China and Southeast Asia[3].

Amphetamine psychosis is a toxic reaction closely resembling schizophrenia that may occur after chronic, short-term, or a single large-dose amphetamine use. Characterized as a paranoid psychosis, the syndrome was first described by Young in 1938[4]. The study of the clinical course of amphetamine psychosis revealed that the resolution of symptoms mostly occurs in ten days, whereas 18% of patients have psychotic symptoms persisting more than one month[5]. The treatment of choice for amphetamine psychosis is the short-term use of dopamine receptor antagonists such as haloperidol. One study has presented data showing that haloperidol is the most common antipsychotic used in treating amphetamine-induced psychotic patients (58%). The rate of non-responders is about 12%, while 33% have a moderate response[6]. Extrapyramidal symptoms (EPS) associated with conventional antipsychotics have been reported around 40%[7] and contribute to drug intolerance and poor compliance[8-9]. In treatment of amphetamine psychosis with traditional antipsychotics, 91.9% of antiparkinsonian drugs were given to the patients[6]. Olanzapine, a serotonin-dopamine antagonist, showed a greater improvement than haloperidol in the treatment of schizophrenia[10] and the first-episode psychosis[11] with less likely to produce EPS[10-13].

Given this background, the authors hypothesized that olanzapine would demonstrate a superior efficacy and safety profile in comparison with haloperidol in treating patients with amphetamine psychosis.

Material and Method

Patients

Patients enrolled in the present study were; 15 years and older; met the DSM-IV[14] criteria for amphetamine psychosis and had a baseline Brief Psychiatric Rating Scale (BPRS) total score of 36 or higher. Patients were excluded if they had current or lifetime schizophrenia and other psychotic disorders (schizoaffective disorder, brief psychotic disorder, schizophreniform disorder, delusional disorder and bipolar disorder), were diagnosed as substance abuse/dependence in the last month, had a documented disease of the central nervous system and were pregnant. Institutional review board approval was obtained for the present study, and written informed consent to participate in the present study was obtained from each patient.

Study Design

The efficacy and tolerability of olanzapine and haloperidol were assessed in a 4-week, double-blind, randomized trial. After 2-7 days screening and washout period, patients were assigned to the study drugs in 1:1 (olanzapine: haloperidol) ratio by using simple randomization. All patients began therapy with 5-10 mg/day of the study drug; after each 7-day period, the study drug could be adjusted in 5-mg increments or decrements within the allowed dose range of 5-20 mg/day during the 4-week study period. Limited uses of benzodiazepine were also allowed as concomitant medication for controlling severe agitation and violent behavior. During the study, trihexyphenidyl up to 4 mg/day

could be prescribed in a short period (≤2 days) to treat emergent extrapyramidal symptoms, defined as a total score >3 on the Simpson-Angus scale (SAS)[15] and/or a total score ≥2 on global Barnes Akathisia Scale (BAS)[16]. Prophylactic use of trihexyphenidyl was discouraged.

For evaluating the compliance, patients were given medication bottles with a sufficient number of study drugs to complete their therapy at each 1-week visit. They were instructed to take the medication every day according to the prescription and to return the bottles and remaining drugs at each phase of the study for drug counting. Patients and their relatives were instructed that some drugs, which may affect therapeutic efficacy and side effects, were not allowed during the remaining period. Patients and their relatives were also asked about contamination at each visit.

Measures of Efficacy and Safety

The primary measure of efficacy was the change from baseline to endpoint (last-observation -carried-forward values) in the total score on the BPRS extracted from the Positive and Negative Syndrome Scale[17] and Clinical Global Impression (CGI)[18]. Clinical response was defined priori as a reduction of 40% or greater in BPRS total score. All rating scales were administered at each scheduled visit.

Safety measures were recorded by SAS and BAS. These included mean change from baseline to endpoint in SAS and BAS, percentage of patients who experienced treatment-emergent parkinsonism (a total score of >3 on SAS at any postbaseline visit), and percentage of patients who experienced treatment emergent akathisia (a total score of ≥2 on BAS at any postbaseline visit). Adverse events were assessed at each visit by spontaneously reported events.

Data Analysis

Initial calculations indicated that 29 patients per treatment group were required to have the power of 0.8 in detecting a difference (alpha=0.05, two-tailed) when comparing therapies with response rates of 40%. All analyses were done on intention-to-treat basis. Patients were included in the analysis of change if they had both a baseline and a postbaseline observation. Endpoint was the last observation of efficacy and safety measures recorded during the study period. If participants discontinued treatment before the end of week 4, for example, endpoint was the efficacy and safety score recorded at week 3.

The protocol established the primary efficacy analysis as the response rate and mean change from baseline to endpoint last observation carried forward in the BPRS total scores. For all continuous efficacy and safety measures, an unpaired t test (Mann-Whitney U test when data is not normally distributed) was used to assess differences in treatment effect between olanzapine and haloperidol treatment groups. In addition, patients were dichotomized as responders or non-responders. Responders were defined as 40% or greater improvement in BPRS total scores from baseline. Chi-square test (two-tailed) was used to analyze treatment effects for categorical efficacy and safety measures. Fishers exact test was used instead of chi-square test when the expected value in a cell was less than 5.

Results

Patient Characteristics and Disposition

A total of 58 patients who met the eligible criteria were randomly assigned to treatment over a 4-week period with olanzapine (N=29) or haloperidol (N=29). The participants' characteristics are given in Table 1. Most participants were men (93.1%, N=54). The mean age of the group was 22.7 years (SD=4.8). The average duration of

Table 1. Characteristics of patients with amphetamine psychosis in a comparison of olanzapine and haloperidol

Characteristic	Olanzapine group (N=29)		Haloperidol group (N=29)	
	Mean	*SD*	*Mean*	*SD*
Age (years)	24.0	5.9	21.3	2.8
Duration of use (years)	4.4	2.0	4.6	2.3
Previous psychotic episodes	1.9	1.9	2.6	2.2
Weight (kgs.)	57.9	5.9	58.0	4.8
Baseline severity score				
1. BPRS total score	54.9	6.3	58.1	7.1
2. CGI severity score	4.8	0.8	5.0	0.5
	Median	*Range*	*Median*	*Range*
Baseline EPS score				
1. SAS	0.0	0.0	0.0	0.0
2. BAS	0.0	0.0-1.0	0.0	0.0-1.0
	N	*%*	*N*	*%*
Gender				
Male	26	89.7	28	96.6
Female	3	10.3	1	3.4
Route of use				
1. oral	0	0	0	0
2. smoked	29	100	29	100
3. other	0	0	0	0
Urine amphetamine				
Positive	15*	55.6	12	41.4

* 2 missing

amphetamine use was 4.5 years (SD=2.1). The average previous psychotic episode was 2.3 times (SD=2.1). All of the patients used smoking as the route of amphetamine use. Nearly half of the participants had positive results for urine amphetamine (48.2%, N=27 of 56).

The mean BPRS and CGI severity score were 56.5 (SD=7.2) and 4.9 (SD=0.7), respectively. There were no significant differences in baseline symptom severity for both BPRS (p=0.08, unpaired t test) and CGI (unpaired t test, p=0.19). The mean baseline SAS and BAS were 0.04 (SD=0.19) and 0.12 (SD=0.33), respectively. There were no significant differences in baseline EPS score for both SAS (unpaired t test, p=0.08) and BAS (unpaired t test, p=0.24).

Two participants in the haloperidol group discontinued the treatment before the end of the first week. The endpoint participants were 29 and 27 in olanzapine and haloperidol groups, respectively. More patients in the olanzapine-treated group (N=27 of 29, 93.1%) than the haloperidol-treated group (N=19 of 29, 65.5%) completed the 4-week period of the present study (χ^2=6.73, df=1, p=0.01). About one-third (N=10 of 29, 34.5%) of haloperidol-treated patients discontinued treatment because of extrapyramidal side effects, compared to 0% of olanzapine-treated patients (χ^2=12.08, df=1, p=0.001). None of the patients in both groups discontinued treatment because of lack of efficacy. One olanzapine-treated patient was lost to follow up and one olanzapine-treated patient was discontinued because of noncompliance.

Medication Doses

The modal dose for an individual patient was defined as the most frequently administered daily dose of the study drug. The mean modal doses during the trial were 7.6 mg/day (SD=2.7) of olanzapine and 8.0 mg/day (SD=2.3) of haloperidol. The endpoint mean doses were 7.5 mg/day (SD=2.6) of olanzapine and 7.8 mg/day (SD=2.2) of haloperidol; endpoint median doses were 6.3 mg/day and 7.5 mg/day, respectively.

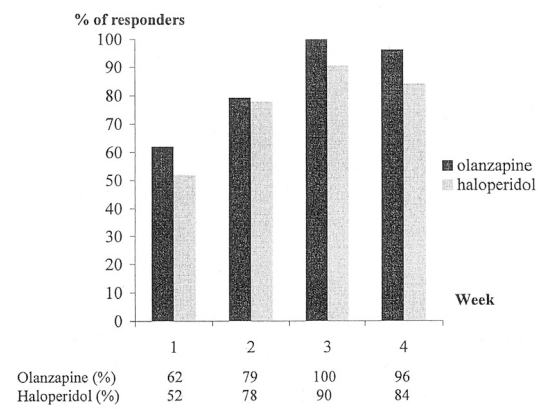

Fig. 1 Percentages (%) of weekly responders (defined as participants who had ≥40% Brief Psychiatric Rating Scale total improvement from baseline) of amphetamine-induced psychotic patients treated with olanzapine or haloperidol

Efficacy

Significant improvements from baseline to endpoint in BPRS were seen in both treatment groups (paired t test, p<0.001) (Table 2). Comparison of the mean BPRS scores from baseline to endpoint between olanzapine and haloperidol were not significant (unpaired t test, p=0.07).

Clinical response, defined as 40% or greater BPRS total improvement from baseline, was seen in both treatment groups since the first week. Ninety three percent of the olanzapine patients (N=27 of 29) and 79.3% of the haloperidol patients (N=23 of 27) were clinically improved at endpoint. These differences were not statistically significant (Fishers exact p=0.25). The percentages of patients who were clinically improved at different times are shown in Fig. 1.

Participants in both treatment groups showed significant improvements on the CGI severity scale at endpoint (paired t test, p<0.001). At endpoint, the CGI severity scores were 1.5 and 1.9 in the olanzapine and haloperidol group, respectively. No significant differences between

Table 2. Brief Psychiatric Rating Scale and Clinical Global Impression Severity Scale of study participants treated with olanzapine or haloperidol

	Olanzapine group			Haloperidol group			
Measure	*N*	*Mean*	*SD*	*N*	*Mean*	*SD*	*p*-value
BPRS							
Week 1	29	32.1	6.6	27	34.2	4.8	
Week 2	29	24.5	4.9	27	30.9	7.5	
Week 3	28	21.1	4.0	21	24.9	6.1	
Week 4	27	21.9	7.9	19	22.8	6.4	
Endpoint[a]	29	21.7	7.7	27	25.3	6.7	0.07[b]
CGI							
Endpoint[a]	29	1.5	1.1	27	1.9	1.0	0.37[b]

[a]All changes from baseline to endpoint in both groups were significant (p<0.001, paired t tests)

[b]Unpaired t test

Table 3. Simpson-Angus Scale and Barne Akathisia Scale change from baseline to endpoint of participants treated with olanzapine or haloperidol

	Olanzapine group[a]		Haloperidol group[b]		
Variable	***Median***	***Range***	***Median***	***Range***	***p*-value**
Simpson-Angus Scale					
Change at endpoint	0.0	0.0	0.2	0.0-3.1	<0.01[c]
Barne Akathesia Scale					
Change at endpoint	0.0	-1.0-0.0	0.0	-1.0-3.0	0.02[d]

[a]N=29 at baseline, and 29 at endpoint

[b]N=29 at baseline, and 27 at endpoint

[c]Mann-Whitney U test

[d]Mann-Whitney U test

treatments in scores on the CGI scales were found at endpoint (unpaired t test, p=0.37) (Table 2).

Extrapyramidal Symptoms

EPS ratings, SAS and BAS, were analyzed to estimate the prevalence of EPS by baseline-to-endpoint change and newly emergent categorical changes. The SAS total score change from baseline to endpoint reflected an unchanged in EPS among the olanzapine-treated patients (median=0.0). In contrast, worsening occurred among the haloperidol-treated patients at endpoint (median=0.2, range=0.0-3.1). The differences of change in SAS significantly favored olanzapine (Mann-Whitney U test, p<0.01) (Table 3).

A similar pattern emerged on the BAS. Change to endpoint on the BAS global scores showed that olanzapine-treated patients scores were close to baseline (median=0.0, range=-1.0-0.0), whereas haloperidol-treated patients scores worsened from baseline (median=0.0, range=-1.0-3.0). This treatment difference was statistically significant (Mann-Whitney U test, p=0.02).

The percentage of patients with treatment-emergent parkinsonism (a total score higher than 3 on the SAS at any postbaseline visit,

Table 4. Adverse events among amphetamine-induced psychotic patients treated with olanzapine or haloperidol

	Olanzapine group (N=29)		Haloperidol group (N=29)		
Events	**N**	**%**	**N**	**%**	***p*-value**
Somnolence	4	15.4	2	7.4	0.67[a]
Headache	2	7.7	0	0.0	0.49[a]
Insomnia	0	0.0	1	3.7	1.0[a]
Skin rash	1	3.8	0	0.0	1.0[a]
Hypersalivation	0	0.0	1	3.7	1.0[a]
Hypertonia	0	0.0	1	3.7	1.0[a]
Dyskinesia	0	0.0	1	3.7	1.0[a]
Extrapyramidal syndrome	0	0.0	15	55.6	<0.001[b]

[a]Fisher's exact test

[b]Chi-Square test

given a total score of 3 or less at all baseline visits) was statistically different between the olanzapine treatment group and haloperidal treatment group (olanzapine: N=0, 0%, haloperidol: N=5 of 27, 18.5%) (Fishers exact test, p=0.02). Similarly, the difference in percentages of patients who experienced treatment-emergent akathisia (BAS of 2 or more at any postbaseline visit, given a global score of less than 2 at all baseline visits) was statistically significant (Fishers exact test, p=0.02).

Adverse Events

Table 4 showed the adverse events. There were no significant differences between the two groups for these eight events, except for extrapyramidal syndrome, which was reported only by haloperidol-treated patients.

Concomitant Trihexyphenidyl Use

None of the olanzapine-treated patients taking at least one dose of trihexyphenidyl compared to 48% (N=13 of 28) of their haloperidol counterparts. A meaningful difference in rates was evident with the latter (χ^2=7.4, df=1, p<0.001).

Weight Gain

Gain in weight was seen in both groups. Weight at week 4 was 63.6 kilograms (SD=4.6) in the olanzapine-treated group and 60.7 kilograms (SD=4.8) in the haloperidol-treated group. It was significantly greater in participants treated with olanzapine than in those treated with haloperidol (unpaired t test=-2.0, df=44, p=0.048, 95%CI=[-5.7]-[-0.02]).

Discussion

In the present 4-week trial of olanzapine and haloperidol in clinically relevant doses, both antipsychotic drugs are effective in treating patients with amphetamine-induced psychosis. Significant reduction in severity of symptoms, as measured by scores on BPRS, was seen in both groups at the first week after initiation of treatment, and further improvements were noted throughout the 4-week trial. In comparison of BPRS and CGI, olanzapine and haloperidol were equally efficacious. Furthermore, the clinical course of amphetamine psychosis in the present study revealed that most of the patients (olanzapine group=96%, haloperidol group=84%) recovered within one month. These findings were close to the results studied in Japan[5].

In the flexible-dose study design, doses of olanzapine and haloperidol were adjusted according to the patients' severity. Because this study is the first clinical trial comparing the efficacy of olanzapine and haloperidol in patients with amphetamine-induced psychosis, the mean doses of olanzapine (7.5 mg/day) and haloperidol (7.8 mg/day) probably are the optimal standard doses used for treating amphetamine psychosis.

The results of the present study revealed that olanzapine, an atypical antipsychotic agent that shows a superior and broader spectrum of efficacy in the treatment of schizophrenia than haloperidol[10-11], was better than haloperidol in most measuring time although the differences were not statistically significant. These may due to two factors. First, the sample size in the present study may be inadequate to detect the differences between the two drugs. Sample size required detecting the difference of efficacy from the result of the present study (olanzapine group=93%, haloperidol group=79%) are 95 cases/group. Then, amphetamine psychosis is a toxic reaction from amphetamine, whereas other functional psychosis, for example, schizophrenia has heterogeneous factors. The different neuropathophysiology between amphetamine psychosis and other functional psychosis lead to the different response to antipsychotic drugs.

In the present study, a significant advantage of olanzapine was evident in the incidence of premature study discontinuations due to an adverse event, none of the olanzapine-treated patients and 35% of their haloperidol counterparts. This difference corresponds to a superior 4-week completion rate for olanzapine treatment (93%) versus haloperidol treatment (66%). The adverse event of haloperidol that caused premature study discontinuation was EPS. Olanzapine-treated patients manifested baseline-to-endpoint unchanged in EPS, whereas haloperidol-treated patients worsened despite significantly greater anticholinergic use. This robust olanzapine-haloperidol difference in EPS was reflected by spontaneous adverse event reporting.

Participants treated with olanzapine had greater weight gain than those treated with haloperidol. Substantial health risks are associated with weight gain, a factor deserving careful consideration in long-term therapy. However, treatment of amphetamine psychosis is usually a short-term therapy that leads to transient weight gain in patients receiving olanzapine.

As stated earlier, short-term use of conventional antipsychotics, for instance, haloperidol is the treatment of choice for amphetamine psychosis. However, the selection of an antipsychotic agent to treat people with amphetamine psychosis must weigh individual patient factors and numerous drug factors, including efficacy, safety, tolerability, and cost. Serotonin-Dopamine antagonists, namely, olanzapine, should be prescribed in cases of less tolerated or severe EPS due to conventional antipsychotics and in treatment-resistant cases because they have higher cost than conventional antipsychotics.

Although clinically amphetamine psychosis is similar to paranoid schizophrenia, the treatment duration is quite different. Unlike the long-term pharmacological treatment of schizophrenia, the biological treatment of amphetamine psychosis is a short-term therapy (mostly within one month). Dosage of dopamine receptor antagonists in amphetamine psychosis is usually lower than that of schizophrenia. The administration should be titrated according to the symptom severity.

There are two limitations in the present study. First, the severity of disease in the studied groups enrolled in this tertiary care setting may be greater than the severity of some patients who go to a primary care hospital for treatment. Difference in severity may affect the treatment outcome. The other, as described earlier, sample size may be too small to detect the differences of efficacy outcomes between olanzapine and haloperidol.

Conclusions

Both olanzapine and haloperidol were efficacious in the treatment of patients with amphetamine psychosis. Olanzapine was superior to conventional neuroleptic haloperidol in treatment safety, with lower frequency and severity of extrapyramidal symptoms. However, olanzapine treatment was associated with greater weight gain than haloperidol treatment. Clinicians who treat the individual patient should determine the appropriate pharmacotherapy based on a risk-benefit assessment.

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References

1. Anthony JC, Warner LA, Kessler RC. Comparative epidemiology of dependence on tobacco, alcohol, controlled substances and inhalants: basic findings from the national comorbidity study. Clin Exp Psychopharmacol 1994; 2: 244-68.

2. Obert J, Rawson RA, Ling W. Exporting methamphetamine treatment to Thailand: a large scale technology transfer project. Presented at The 129th Annual Meeting of APHA, October 22, 2001.
3. Zickler P. Thailand Conference Focuses on Methamphetamine Research. NIDA Notes 2001; 16: 13-4.
4. Young D, Scoville WB. Paranoid psychosis in narcolepsy and the possible danger of benzedrine treatment. Med Clin North Am 1938; 22: 637-46.
5. Sato M, Numachi Y, Hamamura T. Relapse of paranoid psychotic state in methamphetamine model of schizophrenia. Schizophr Bull 1992; 18: 115-22.
6. Chantarasak V. Patients with amphetamine psychosis admitted at Somdet Chaopraya Hospital. J Psychiatr Assoc Thai 2000; 45: 17-31.
7. Ayd FJ. A survey of drug-induced extrapyramidal reactions. JAMA 1961; 175: 102-8.
8. Weiden PJ, Shaw E, Mann JJ. Cause of neuroleptic noncompliance. Psychiatric Annual 1986; 16: 571-5.
9. Casey DE. Motor and mental aspects of extrapyramidal syndromes. Int Clin Psychopharmacol 1995; 10 (Suppl 3): 105-14.
10. Tollefson GD, Beasley CM Jr, Tran PV, Street JS, Krueger JA, Tamura RN, et al. Olanzapine versus haloperidol in the treatment of schizophrenia and schizoaffective and schizophreniform disorders: results of an international collaborative trial. Am J Psychiatry 1997; 154: 457-65.
11. Sanger TM, Lieberman JA, Tohen M, Grundy S, Beasley C Jr, Tollefson GD. Olanzapine versus haloperidol treatment in first-episode psychosis. Am J Psychiatry 1999; 156: 79-87.
12. Beasley CM Jr, Tollefson G, Tran P, Satterlee W, Sanger T, Hamilton S. Olanzapine versus placebo and haloperidol: acute phase results of the North American double-blind olanzapine trial. Neuropsychopharmacology 1996; 14: 111-23.
13. Beasley CM Jr, Sanger T, Satterlee W, Tollefson G, Tran P, Hamilton S. Olanzapine versus placebo: results of a double-blind, fixed-dose olanzapine trial. Psychopharmacology (Berl) 1996; 124: 159-67.
14. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, 4th ed. Washington, DC: American Psychiatric Association; 1994.
15. Simpson GM, Angus JW. A rating scale for extrapyramidal side effects. Acta Psychiatr Scand Suppl 1970; 212: 11-9.
16. Barnes TR. A rating scale for drug-induced akathisia. Br J Psychiatry 1989; 154: 672-6.
17. Kay SR, Fiszbein A, Opler LA. The positive and negative syndrome scale (PANSS) for schizophrenia. Schizophr Bull 1987; 13: 261-76.
18. Guy W. ECDEU Assessment Manual for Psychopharmacology: Publication ADM 76-338. Washington DC: US Department of Health, Education, and Welfare, 1976: 218-22.

การศึกษาเปรียบเทียบยาโอลานซาพีนกับยาฮาโลเพอริดอล ในผู้ป่วยที่มีอาการทางจิตจากแอมเฟตามีน

ธวัชชัย ลีพหานาจ, รณชัย คงสกนธ์, พงศธร เนตราคม

วัตถุประสงค์: เพื่อศึกษาเปรียบเทียบประสิทธิภาพและอาการข้างเคียงของยาโอลานซาพีนและยาฮาโลเพอริดอลในการรักษาผู้ป่วยที่มีอาการทางจิตจากแอมเฟตามีน

วัสดุและวิธีการ: ผู้ป่วยที่มีอาการทางจิตจากแอมเฟตามีนที่ผ่านเกณฑ์จำนวน 58 ราย ถูกสุ่มให้ได้รับยาโอลานซาพีนจำนวน 29 ราย และยาฮาโลเพอริดอล 29 ราย ผู้ป่วยทุกรายจะเริ่มต้นได้รับยาขนาด 5-10 มิลลิกรัมต่อวัน หลังจากนั้นจะทำการปรับขนาดเพิ่มขึ้นหรือลดลง 5 มิลลิกรัมทุก 7 วัน โดยให้ขนาดยาอยู่ระหว่าง 5-20 มิลลิกรัมต่อวันตลอดระยะเวลา 4 สัปดาห์ของการรักษา

ผลการศึกษา: ยาทั้งสองชนิดให้ผลการรักษาดีขึ้นตั้งแต่สัปดาห์แรก ร้อยละ 93 ของผู้ป่วยที่ได้รับโอลานซาพีน (27 รายใน 29 ราย) และร้อยละ 79.3 ของผู้ป่วยที่ได้รับฮาโลเพอริดอล (23 รายใน 27 ราย) อาการป่วยดีขึ้นเมื่อสิ้นสุดการรักษา ไม่พบความแตกต่างอย่างมีนัยสำคัญทางสถิติของการรักษาด้วยยาทั้งสองชนิดทั้งเมื่อสิ้นสุดการรักษา (Fisher's exact p=0.25) ค่าของ Simpson-Angus total score เมื่อสิ้นสุดการรักษาของกลุ่มที่ได้รับยาโอลานซาพีนไม่เปลี่ยนแปลง (median=0.0, range=0.0) ในขณะที่กลุ่มที่ได้รับยาฮาโลเพอริดอลมีค่าแย่ลง (median=0.2, range=0.0-3.1) ซึ่งมีความแตกต่างอย่างมีนัยสำคัญทางสถิติ (p<0.01) ค่าของ Barnes global scores ในกลุ่มที่ได้รับโอลานซาพีนเมื่อสิ้นสุดการรักษาใกล้เคียงกับค่าตั้งต้น (median=0.0, range=-1.0-0.0) ขณะที่กลุ่มที่ได้รับฮาโลเพอริดอลมีการเปลี่ยนแปลงที่แย่ลง (median=0.0, range=-1.0-3.0) ซึ่งมีความแตกต่างอย่างมีนัยสำคัญทางสถิติ (p=0.02)

สรุป: ทั้งโอลานซาพีนและฮาโลเพอริดอลเป็นยาที่มีประสิทธิภาพในการรักษาผู้ป่วยที่มีอาการทางจิตจากแอมเฟตามีน แต่โอลานซาพีนมีความปลอดภัยในแง่ของอาการข้างเคียงเกี่ยวกับ extrapyramidal symptoms มากกว่า