



# SERTRALINE AND ALPRAZOLAM IN THE TREATMENT OF PANIC DISORDER

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## ABSTRACT

A compared, 12 week, placebo controlled study, with fixed dose, outpatient study of patients diagnosed with panic disorder with and without agoraphobia according to ICD-10, was conducted to evaluate the efficacy and safety of sertraline and alprazolam. The study included 40 patients, divided in two groups. We evaluated number of ICD-10-defined panic attacks, agoraphobia and anticipatory anxiety. All patients were aged 18 year and older and were randomized to either sertraline or alprazolam. Sertraline applied in fixed doses of 20 mg/day and alprazolam in doses 1-1,5 mg/day significantly reduced the frequency of panic attacks in panic disorder patients, reduced symptoms of agoraphobia and anticipatory anxiety.

**KEY WORDS:** panic disorders, SSRI, benzodiazepine.

## INTRODUCTION

Panic disorder implied possible efficiency of the selective serotonin reuptake inhibitor (SSRI) in the treatment (1). Lifetime prevalence in the USA and Europe is 3%. Very often this disorder affects young population (2). Sertraline is a specific and potent, highly selective SSRI which can be used in the treatment of panic disorder with or without agoraphobia (3,4). Generally, panic disorders and panic attacks affect approximately 11% of the general population. This study examines the effects of prior benzodiazepine treatment, alprazolam compared to the current treatment with sertraline among patients with panic disorder with or without agoraphobia. It is well known that the majority of patients with panic disorder are treated with benzodiazepines, but the effectiveness of this therapy is insufficient, especially in cases where agoraphobia and anticipating anxiety were present (5).

## PATIENTS AND METHODOLOGY

This study involved 40 patients treated at the out-patient department with diagnosed panic disorder with or without agoraphobia according to the ICD-10 criteria.

All patients were older than 18. They were divided into the two groups. First group of 20 patients was treated with 50 mg/day of sertraline, and second (20 patients) with 1-1,5 mg/day of alprazolam over 12 weeks period. In this research a questionnaire was applied that consisted of basic social and demographic data, Hamilton Anxiety Rating Scale (HAMA), and Hamilton Depression Rating Scale (HAMD), as well as questionnaire about the side effects of the applied medications.

## RESULTS

Table 1. presents gender structure of the sample. We can notice that there is no statistically significant difference, although there are slightly more women in the group treated with sertraline. Table 2. displays the age structure of the sample. We can notice that the most dominant age group is 30-39 for those treated with sertraline, and 20-29 for those treated with alprazolam. There is no statistically significant difference between the groups. Table 3. presents the mean values of age in both groups, which does not differ significantly. The mean age in the group of patients treated with sertraline is 35 years; while in the group of patients treated with alprazolam is

			MEDICATION		
			SERTRALINE	ALPRAZOLAM	TOTAL
GENDER	MALE	N	8	10	18
		%	40,0	50,0	45,0
	FEMALE	N	12	10	22
		%	60,0	50,0	55,0
TOTAL	N	20	20	40	
	%	100,0	100,0	100,0	

TABLE 1. Patients according to gender

Chi-square=0,525 p>0,05

			MEDICATION		
			SERTRALINE	ALPRAZOLAM	TOTAL
AGE	20-29 YEARS	N	7	7	14
		%	35,0	35,0	35,0
	30-39 YEARS	N	9	5	14
		%	45,0	25,0	35,0
	40-49 YEARS	N	2	4	6
		%	10,0	20,0	15,0
50 AND MORE	N	2	4	6	
	%	10,0	20,0	15,0	
TOTAL	N	20	20	40	
	%	100,0	100,0	100,0	

TABLE 2. Patients according to age

Chi-square =2,476 p>0,05

MEDICATION	N	MEAN	STANDARD DEVIATION	STANDARD ERROR MEAN
SERTRALINE	20	35,00	9,205	2,058
ALPRAZOLAM	20	36,65	11,123	2,487

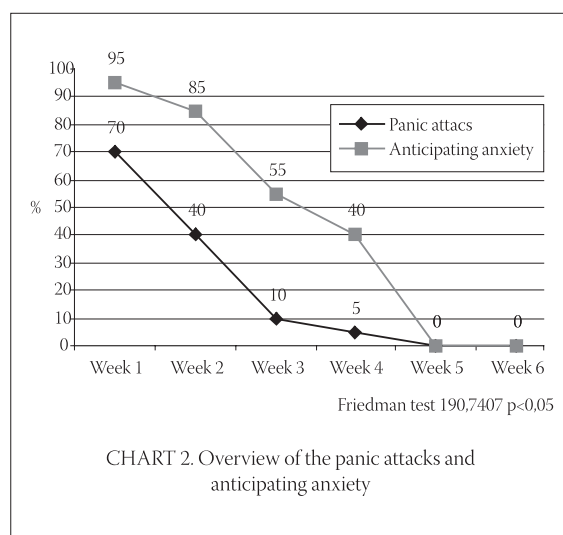
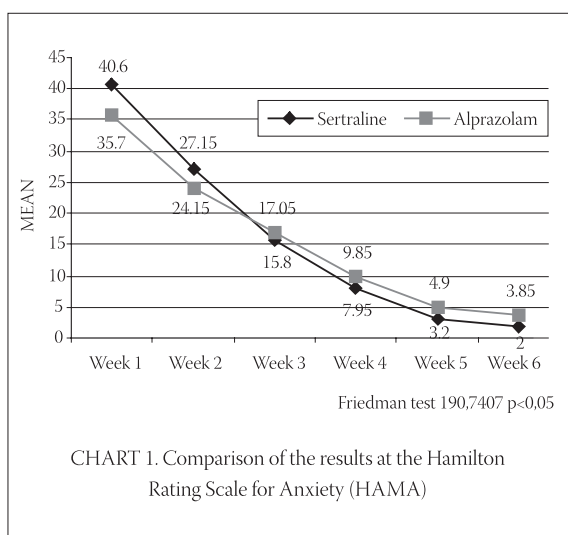
TABLE 3. Overview of the average age

Lavene test for quality of variances F=2,296 p>0,05

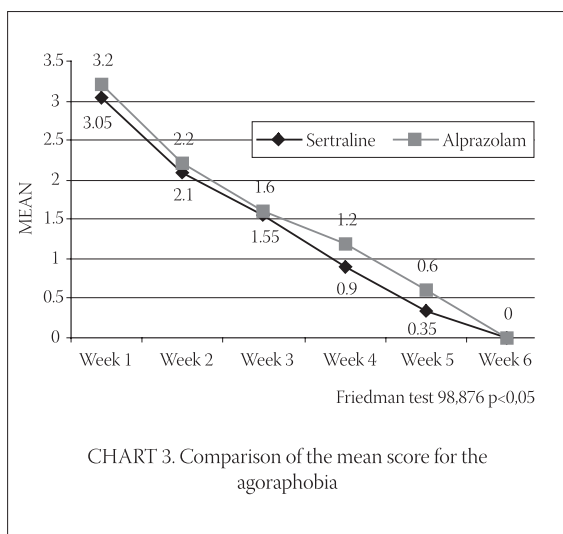
APPLIED MEDICATION		WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6
SERTRALINE	MEAN	25,35	17,35	10,20	5,25	3,20	1,00
	STANDARD DEVIATION	8,732	6,635	5,745	4,482	4,830	1,622
ALPRAZOLAM	MEAN	27,85	20,00	12,70	6,05	2,40	1,25
	STANDARD DEVIATION	8,677	6,407	5,131	4,872	3,085	2,489
TOTAL	MEAN	26,60	18,67	11,45	5,65	2,80	1,12
	STANDARD DEVIATION	8,685	6,577	5,524	4,638	4,020	2,078

TABLE 4. Comparison of the results at the Hamilton Rating Scale for Depression (HAMD)

Friedman test 179,3063 p<0,05



36,65 years. Table 4. presents comparison of the results at the Hamilton Rating Scale for Depression (HAMD) between the two groups, where we can see depressive symptoms decreased at the end of the second week that in the group of patients treated with sertraline (p<0,05). At the Chart 1. results of the Hamilton Rating Scale for Anxiety are presented. It is noticeable that in the group of patients treated with SSRI, beside the higher initial scores, there was a significant decrease of anxiety symptoms after the second week, compared to alprazolam. Group treated with alprazolam shows less effects of the medication in terms of relieving anxiety symptoms after the third week. Chart 2. shows the frequencies of panic attacks and anticipating anxiety. It is noticeable that in the group of patients treated with SSRI, already during the second week, among 30% of patients panic attacks disappeared, while anticipating anxiety disappeared in 10% of cases. After the fourth week Panic attacks and anticipating anxiety completely withdrew. (p<0,05). It is noticeable in the Chart 3. that fears sig-



nificantly decreased among patients treated sertraline and alprazolam, although patients treated with sertraline felt the effect of the medication somewhat sooner, or to be more precise during the third week (P<0,05).

## CONCLUSIONS

Patients with panic disorder with or without Agoraphobia treated with SSRI (sertraline) in fixed dose of 50 mg/day showed reduction of panic attacks compared to the patients on Benzodiazepine (alprazolam) treatment in dose of 1-1,5 mg/day. With this we can conclude that the sertraline is efficient in the treatment of panic disorder with or without Agoraphobia.

## REFERENCES

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