

EFFECTIVENESS OF CARIPRAZINE IN FIRST-EPISODE SCHIZOPHRENIA PATIENTS WITH COMORBID CANNABIS USE DISORDER: Post-hoc analysis of a Spanish observational study

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INTRODUCTION

- Schizophrenia often co-occurs with substance use disorders, particularly with cannabis use disorder (CUD).
- Current treatments frequently fail to concurrently address both disorders, resulting in patients requiring integrated treatments being overlooked.
- This is especially important in first-episode schizophrenia patients, where with the right treatment strategy further relapses as well as decreased functioning and quality of life can be prevented.

METHODS

- This was a 6-month, multi-centre, observational study carried out at 6 institutions in Spain. The Ethics Research Committee at the Gregorio Marañón University Hospital in Madrid (FPD-CAR-2021-01) granted ethical approval, and all participants provided informed written consent.
- The study included adult outpatients aged between 18 and 65 years, diagnosed with schizophrenia and cannabis use disorder as per the DSM-5 criteria, who were receiving cariprazine treatment based on medical judgement. The exclusion criteria were restricted to pregnant or breastfeeding women and patients with co-existing medical conditions that could potentially skew the study results.
- The study evaluated changes in schizophrenia and CUD symptoms via several primary outcome measures.
- The present post-hoc analysis focused on a sub-group of patients with first episode psychosis. Patient characteristics were summarized using descriptive statistics in percentages, means and standard deviations. Least squares (LS) means were calculated for the change from treatment start to treatment end for PANSS, CGI-SCH, CAST, SDS, SDI, CGI-S and CGI-I using a mixed model for repeated measures (MMRM). All analyses were conducted using SAS.

AIM: To assess the effectiveness of cariprazine on the phenotype of patients with first-episode schizophrenia and cannabis use disorder.

Primary outcomes measures:

- Positive and Negative Syndrome Scale (PANSS)
- Clinical Global Impression-Schizophrenia (CGI-SCH)
- Cannabis Abuse Screening Test (CAST)
- Severity of Dependence Scale (SDS)
- Clinical Global Impressions-Severity (CGI-S) and Improvement (CGI-I)
- Sheehan Disability Inventory (SDI)

RESULTS

- From the cohort, 18 patients had first episode schizophrenia and 72% of them was male (Table 1).
- Treatment characteristics and effectiveness of treatment is presented in Table 2 and 3, respectively.

Table 3. Effectiveness of treatment

	TREATMENT START mean (SD)	TREATMENT END means (SD)	LS mean change (SE)	ES
PANSS Total	112.1 (26.9)	56.9 (14.8)	-55.17 (2.94)***	-5.3
Positive factor score	29.1 (8.1)	13.9 (4.6)	-15.11 (0.90)***	-4.4
Negative factor score	29.2 (6.7)	15.7 (3.6)	-13.50 (0.82)***	-5.8
Cognitive factor score	18.3 (5.2)	8.6 (2.8)	-9.72 (0.57)***	-5.0
Hostility / Excitement factor score	17.7 (5.5)	9.1 (4.3)	-8.61 (0.74)***	-3.4
Depression / Anxiety factor score	15.4 (4.5)	8.5 (2.9)	-6.89 (0.46)***	-3.5
CGI-SCH	19.9 (5.2)	10.7 (2.1)	-9.22 (0.51)***	-5.0
Positive symptoms	3.8 (1.3)	1.9 (0.7)	-1.89 (0.16)***	-3.0
Negative symptoms	4.0 (1.3)	2.3 (0.5)	-1.67 (0.12)***	-5.8
Depressive symptoms	3.9 (1.5)	2.3 (0.8)	-1.56 (0.18)***	-2.3
Cognitive symptoms	3.9 (0.8)	1.9 (0.6)	-2.06 (0.14)***	-6.1
Global severity	4.3 (1.2)	2.2 (0.6)	-2.06 (0.16)***	-3.7
CGI-I	3.2 (1.8)	1.3 (0.6)	-2.67 (0.14)***	-4.5
CGI-S	4.4 (0.8)	3.0 (0.5)	-0.44 (0.12)***	-3.7
SDI Total	25.8 (6.4)	14.6 (7.0)	-11.23 (1.52)***	-2.2
Work	6.4 (1.5)	4.2 (1.7)	-2.17 (0.39)***	-1.8
Social life	6.0 (2.0)	3.6 (1.9)	-2.39 (0.39)***	-1.8
Family life	6.7 (1.6)	3.3 (2.1)	-3.44 (0.48)***	-2.1
Perceived stress	6.1 (2.0)	2.8 (1.6)	-3.28 (0.35)***	-3.0
Perceived social support	0.6 (0.2)	0.7 (0.2)	0.04 (0.04)	0.3
CAST	21.7 (2.9)	13.8 (6.9)	-7.89 (1.67)**	-1.4
SDS	10.9 (6.6)	3.8 (3.5)	-7.11 (0.84)***	-3.0

*** p-value <0.0001; ** p-value <0.001

CAST, Cannabis Abuse Screening Test; CGI-I, Clinical Global Impressions-Improvement; CGI-S, Clinical Global Impressions-Severity; CGI-SCH, Clinical Global Impression-Schizophrenia; ES, effect size; LS, least squares; PANSS, Positive and Negative Syndrome Scale; SD, standard deviation; SDI, Sheehan Disability Inventory; SDS, Severity of Dependence Scale; SE, standard error

Table 1. Demographic characteristics

Population	
Dual disorder patients, n (%)	18 (100)
Demographics	
Age, mean (SD), y	27.4 (6.5)
Males, n (%)	13 (72.2)

Table 2. Treatment characteristics

	TREATMENT START	TREATMENT END
Cariprazine therapy, n (%)		
1.5 mg / day	-	-
3.0 mg/day	6 (33.3)	8 (44.4)
4.5 mg/day	9 (50.0)	6 (33.3)
6.0 mg/day	2 (11.1)	3 (16.7)
Other pharmacotherapies		
Antidepressant	9 (50.0)	10 (55.6)
Benzodiazepines	6 (33.3)	5 (27.8)
Antipsychotics	6 (33.3)	4 (22.2)
Antiepileptics	4 (22.2)	4 (22.2)
Alcohol interdictors	2 (11.1)	3 (16.7)
Opioid agonists	1 (5.6)	1 (5.6)
Non-pharmacological therapy	11 (61.1)	12 (66.7)

CONCLUSION

Cariprazine seems to be an effective treatment option for patients with the first-episode phenotype of schizophrenia and cannabis use disorder.