

Synthetic cannabinoid-induced psychoses in hospitalized patients: Clinical characteristics and patient profile

VY Skriabin¹, MA Vinnikova^{1,2}

¹ Moscow Research and Practical Centre on Addictions

² I.M. Sechenov First Moscow State Medical University of the Ministry of Health of the Russian Federation (Sechenov University)

Objective: As the classification of synthetic cannabinoid (SC)-induced psychoses is still a controversial issue, this study aimed to evaluate SC-induced psychoses in terms of patient profile and clinical characteristics with reference to their follow-up.

Methods: A total of 46 male patients (n=46; mean (standard deviation [SD]) age: 23.2 (3.5) years) diagnosed with psychotic disorder induced by the SC use who were hospitalized at the intensive care unit or emergency department of the Moscow Research and Practical Centre on Addictions were included in this single-centre, longitudinal, observational cohort study. The catamnestic follow-up period was up to 2 years.

Results: We evaluated different clinical cases of SC-induced psychoses and identified four clinical types of them. Then we performed a catamnestic follow-up of patients to reveal the possible schizophrenic process manifestation in patients who use SC.

We identified four clinical types of SC-induced psychoses on the ground of leading psychopathological syndrome.

1. *Psychosis with predominant mental automatism* (14 patients, or 33%). Against the backdrop of emotional tension, severe anxiety, and confusion, patients shortly presented the delusional mood, agitation, and delusional persecutory ideas, with subsequent mental, motor and, less frequently, senestopathic automatisms. In most cases, it was thought broadcasting, thought insertion or thought withdrawal, “made emotions” and speech automatisms. Then the Kandinsky-Clerambault’s syndrome developed with verbal hallucinations, the delusion of influence and persecutory delusion, as well as automatisms.

2. *Psychosis with predominant delirium symptoms* (11 patients, or 27 %). Against the backdrop of specific classical triad of delirium (includes disorientation to date and place with the orientation to person, psychomotor agitation or anxiety and vivid hallucinations, most commonly – visual), the structure of the psychotic disorder included tactile hallucinations and auditory verbal hallucinations. A specific feature of the psychosis is the appearance of the elements of Kandinsky-Clerambault’s syndrome: the delusion of influence and automatisms.

3. *Psychosis with predominant affective-delusional symptoms* (9 patients, or 21%). Against the backdrop of an acutely developed sensation of fear, patients presented the delusional ideas of interpretation and reference followed by persecutory delusion. However, at the beginning of psychosis patients showed motor retardation (they described it as “getting stuck”), very commonly with the elements of catatonia, which had drastically changed to motor agitation. At manifestation, delusion became multi-thematic: persecutory delusion was interwoven with the delusional ideas of philosophical and esoteric nature. For instance, patients told that their consciousness expanded, its boundaries blurred and they understood how the world was created. Most of the patients began to associate themselves with the center of the Universe, said that they explored all the mysteries of creation. Some of the patients expressed maniform statements. These epiphanies were accompanied by short calming and even euphoria. The narrative was mainly uncertain, with lengthy reasoning and sharp transitions from one topic to another, which reminded the specific schizophrenic thought disorders and required differential diagnosis.

4. *Psychosis with predominant hallucinatory symptoms* (8 patients, or 19%). After a short (from several hours to one day) prodromal period filled with anxiety, irrational fear, and psychic hyperaesthesia, patients experienced acute verbal hallucinosis. Hallucinations were scenic; usually, patients heard threatening monologues or dialogues from somewhere behind the wall or behind the back. The plot of hallucinations was generally narrow and was typically associated with the patient’s fear of coming in view of the law enforcement agencies due to the illicit use of psychoactive substances or their search. Hallucinations were accompanied by the sensual delusion with the same plot. Patients presented specific behavior: they responded to voices, tried to enter into dialogue with them, escape or hide from voices and in some cases showed the aggression toward the perceived enemies.

Conclusion: Our findings show that psychoses are typical for the SC intoxication and mostly common they influence young adults. Our study emphasizes the role of appropriate psychiatric management of SC-induced psychoses since often only catamnestic long-term follow-up enables to determine the correct diagnosis and reveal the manifestation of the schizophrenic process. Thus, we suppose that in such cases cooperation between the psychiatrists and addiction psychiatrists would be the optimal tactic.

