



TREATMENT OF CANNABIS RELATED PSYCHOSIS WITH ELECTROCONVULSIVE THERAPY (ECT): A RAPID APPROACH

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Abstract: Background: Currently cannabis connected disorders are more or less prevalent. **Objective:** To clarify cannabis related crucial condition. **Results:** Our psychotic urgent patient responded quickly to ECT. **Discussion:** This report demonstrated that ECT was life-saving and prominent in handling cannabis caused severe psychotic disorder. **Conclusion:** It appears that ECT is a safe and rapid approach in the management of urgent cannabis related psychosis.

Key words: Cannabis related psychosis; ECT

Introduction: In Iran, in the previous years, hashish, marijuana and amphetamine derivatives were smuggled in from foreign territories (including the east and the west countries), but currently it is illegally produced and manufactured in 'underground'.

Hashish effectiveness and potentiality is greater than marijuana. Smoking hashish or marijuana is more or less associated with psychosis, so that even a single experience or occurrence of abuse could induce hallucinations and delusions.

In the current industrialized world, especially the West, the prevalence of physical and mental

diseases are moving ahead so that, health researchers, investigators, and health policy makers have been spending more time, money and attention to the management (1-10) prevalence, etiology, epidemiology and prevention of psychiatric disturbances (11-30).

Considering raising level of stress, anxiety, depression and other psychiatric illnesses, substance joined and connected disease, particularly and mainly stimulants caused disorders have been contemplated as ascending enigma (31-69). These days, inpatient admissions of mental disorders resulted from stimulants abuse are going up (70-112).

Patient depict: Our patient was a 20 years old single, soldier with high school education. He lived with his parents in Marvdasht city of Fars province in the south part of Iran.

PM began smoking marijuana and tobacco since 4 years prior to admission. He step by step

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advanced irritability, aggressive behaviors, and impulsivity.

Since 2 months prior to admission he started smoking hashish and increased the amount of marijuana, then developed hyperactivity, insomnia, aggressive behavior, irritability, persecutory and paranoid delusions and hallucinations.

He had occasionally been using benzodiazepines and opioids.

He had history of smoking cannabis in his family.

During comprehensive physical and precise neurological examinations we could not disclose any considerable abnormality.

Laboratory tests including urine screening tests for drugs were positive for THC, benzodiazepine, and morphine.

Viral markers (HIV, HCV and HB Ag) were normal.

Regarding DSM-5 criteria and exact medical, psychiatric, and substance use history PM was presumed as cannabis related psychotic disorder.

Patient received chlorpromazine 300 mg, valproate 600 mg, and olanzapine 30 mg per day for the treatment of irritability, hyperactivity, insomnia, and impulsivity.

In the 2nd day of dual diagnosis ward admission, due to the lack of response to the administered medications, and emergency situation of the patient, we started double bilateral ECT i.e. 2 sessions of ECT in the same session of anesthesia.

In the day of admission his cannabis withdrawal craving score was high.

According to the exact measurement, detailed interview and close monitoring (3 times per day) for cannabis psychosis and withdrawal symptoms, **He reported and experienced a rapid descending level of craving and psychiatric symptoms after taking the 2nd session of double ECT (overall 4 sessions of ECT).**

Following 16 days of hospital admission and receiving 5 sessions of double ECT (overall 10 sessions of ECT), PM was discharged without any psychotic or withdrawal symptoms.

Discussion: This study demonstrated that ECT has rapid and dramatic influence on managing and subsiding cannabis related psychotic disorder. Use of ECT in these urgent and lifesaving conditions has not fully been narrated previously. Accordingly a systematic prospective study of ECT in the treatment of cannabis related psychosis and withdrawal symptoms should be reported, and consequently our experience is a wealthy addition to our literature.

Conclusion: We presumed that ECT has swift and valuable effects in the treatment of cannabis related psychotic reaction and cannabis withdrawal craving.

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