

Improvement of Methamphetamine-Induced Psychosis, Retardation and Craving after Few Sessions of ECT

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Abstract

Background: Methamphetamine abuse is now a significant problem in Iran.

Objective: To present usefulness of ECT in the improvement of methamphetamine induced psychosis, methamphetamine withdrawal retardation and methamphetamine withdrawal craving, in a single case.

Results/Conclusion: ECT can be beneficial in the treatment of these serious conditions.

Introduction

We would like to present our patient with the diagnosis of methamphetamine induced psychosis with onset during intoxication who improved and responded completely to 4 sessions of ECT (Electro Convulsive Therapy). In Iran amphetamine abuse and dependence was a minor problem in the past years [1-5], but has been changing to a significant problem since several years ago [6-8]. Since a couple of years ago it has been developed to a major and serious psychiatric problem especially in the young [9,10]. Formerly, methamphetamine had been smuggled into Iran illegally from the west, but in recent years it is synthesized in underground laboratories in Iran. The methamphetamine imported from the west had lower potency and as the result caused milder forms of mood and psychotic disorders in comparison with synthesized methamphetamine which is prepared in Iran. The synthesized form is more potent and causes severe consequences especially psychosis. In some cases they have developed full psychosis after one episode of methamphetamine smoking. The majority of our psychotic patients refer with persecutory and paranoid delusions and also with auditory and visual hallucinations.

Patient Presentation

Mr. M.S. was a 24-year old single man, unemployed, with education up to third grade of guidance school, living in Shiraz city of Fars province in Iran with his parents. He didn't have any family history of psychiatric problem but a previous history of admission in psychiatric ward due to methamphetamine-induced psychosis in 14 October 2009. He didn't report any history of medical problem especially head trauma.

He had been smoking opium since 6 years prior to admission (February 1, 2010). Since 4 years prior to admission, his frequency of opium smoking increased and reached to daily smoking. He also gave history of occasional cannabis abuse in the past but he stopped using it in recent months. Since 2 years prior to admission he began

methamphetamine smoking occasionally; however he reported that he increased the frequency to daily smoking since 6 months prior to admission. Two months later (after increasing the frequency of smoking), he developed aggressive behavior, agitation, self-talking, auditory and visual hallucination, labile mood and was admitted in Ebnesina hospital with the diagnosis of methamphetamine-induced psychosis and took medications and discharged without any sign of psychiatric disorder. But a few days after discharging, he again started smoking methamphetamine and developed poor sleep and appetite, self-injury, persecutory delusion believing that someone is persuading him and also reported that he had been controlled by camera in his room. He had history of auditory hallucinations hearing that some people are making noise, aggressive behaviors and agitation. He was brought to the emergency room of Ebnesina hospital by his parents and admitted in dual diagnosis ward. At the time of admission (February 1, 2010) complete physical and neurological examination was done which revealed no abnormal finding. Laboratory tests including screening tests for hepatitis and HIV were carried out which were normal. The screening tests for drugs of abuse showed no positive results. Antipsychotic drug was started but due to unresponsiveness after about two weeks and also severe retardation, Mr. M.S. was considered to be in mortal danger therefore, the antipsychotic medication was discontinued and he was given emergency ECT. The electrodes were applied bilaterally, and he was administered two seizures during the same anesthetic session (double ECT). After taking two sessions of double ECT he didn't have any psychotic symptoms, withdrawal craving and psychomotor activity increased and his retardation disappeared. After 10 sessions of ECT and a hospital course of 29 days, he was discharged without any psychiatric problem.

Conclusion

ECT may be beneficial in the treatment of methamphetamine induced psychosis, methamphetamine withdrawal retardation and methamphetamine withdrawal craving.

Conflict of Interests

This paper did not receive financial support and there are no conflicts of interest.

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