

Case Report**Management of Methamphetamine-Induced Psychosis by 8 sessions of ECT****Jamshid Ahmadi¹, Ali Sahraian², Seyed Ali Dastgheib², Arash Mowla², Laaya Ahmadzadeh²**¹Professor and Founder Director; Substance Abuse Research Center; Dual Diagnosis Ward; Shiraz University of Medical Sciences, Shiraz, Iran.²Assistant Professor; Substance Abuse Research Center; Shiraz University of Medical Sciences, Shiraz, Iran.***Corresponding author**

Jamshid Ahmadi

Email: jamshid_ahmadi@yahoo.com

Abstract: At present, methamphetamine abuse is a considerable problem. To present usefulness of ECT in the management of methamphetamine induced psychosis. ECT can be a good choice in the treatment of this serious condition.**Keywords:** ECT, methamphetamine.

INTRODUCTION

We want to explain our patient with the diagnosis of methamphetamine induced psychosis with onset during intoxication that managed and responded well to 8 sessions of ECT (Electro Convulsive Therapy).

In Iran psychiatric disorders and substance use disorders specially amphetamine and methamphetamine abuse was a minor problem in the past years [1-10], but has been changing to an important problem since several years ago. Since few years ago it has been developed to a major psychiatric problem especially in the young [11-13].

Formerly, amphetamine and methamphetamine had been smuggled into Iran illegally from abroad especially the west, but in recent years it is synthesized and made in underground laboratories in Iran. The methamphetamine imported from abroad had lower potency and as the result caused milder forms of psychotic or mood disorders in comparison with synthesized methamphetamine which is made in Iran. The synthesized form is much more potent and causes severe consequences especially psychosis. Sometimes they have developed full psychosis after even one episode of methamphetamine use. The majority of our psychotic patients refer with paranoid or persecutory delusions and also with visual or auditory hallucinations.

CASE REPORT

Mr. H. GH. Was a 24-year old divorced unemployed man with fifth grade of primary school education, living in Shiraz city of Fars province in Iran

with his parents. He didn't have any family or personal past psychiatric history. He also didn't report any history of medical problem. He had been smoking cannabis since 9 years prior to admission (PTA). Since 2 years PTA he started smoking methamphetamine. Since 3-4 month PTA, he increased frequency to daily smoking; then developed verbal and physical aggression, threatening his family, visual hallucination (seeing someone around his house), persecutory delusion (believing that someone wanted to kill him), restlessness and decreased sleep. He was brought to emergency room of Ebnesina hospital by his family and admitted in dual diagnosis ward.

At the time of admission, we did complete physical and neurological examination. Laboratory tests including screening tests for markers of serology for HIV and hepatitis were carried out which revealed no abnormal finding. Screening tests for drugs of abuse showed positive results for buprenorphine but the results of other drugs of abuse including cannabis, ecstasy, methadone, benzodiazepine and alcohol were negative.

At time of admission, we started risperidone with the dose of 6 mg/d for the patient. After one week, in psychiatric evaluation, no significant change was observed. So the dose of risperidone was increased to 12 mg/d at 15th day of admission and also biperiden with the dose of 6 mg/d was started for him for presentation of extra pyramidal symptoms. However the patient's condition didn't show any significant improvement and he became too sedated and drowsy probably due to increased dose of risperidone or as withdrawal from methamphetamine. After 5 days (20th

day of hospital course), we started double bilateral ECT. After receiving 4 sessions of ECT, his psychotic symptoms (including sedation) disappeared. After 8 sessions of ECT and on 30th day of hospital course, patient was discharged.

DISCUSSION

This short report indicates ECT may be effective in treating methamphetamine induced psychosis. Its use in these conditions have been reported previously [14,15]. However, a systematic prospective trial of ECT is yet to be published, and this short report is a significant addition to the literature. It is of interest that double ECT continues to be used with high efficacy in leading centers in Iran.

CONCLUSION

ECT can be a good choice in the treatment of methamphetamine induced psychosis.

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