Alcohol Withdrawal Craving Treatment with Low Dose of Buprenorphine: A New Experience

Jamshid Ahmadi*

Keywords: Alcohol withdrawal craving; Buprenorphine

Introduction

Currently, the incidence of psychiatric problems is progressing [1-17]. Considering psychiatric disorders, substance associated disorders, especially alcohol and stimulants induced disorders have been considered as progressive problems [18-58].

Although the number of deaths and other problems caused by drinking of alcohol is raising, however, the number of medications available to treat alcohol use disorders is very low [59]. The FDA indicated use of buprenorphine is for the treatment of pain and opioids withdrawal [1].

Now, we are administering buprenorphine as a new access for the treatment of severe alcohol withdrawal craving, because we think and theorize that (our rationale) biochemistry engaged in opioid dependence is mainly similar to that of alcohol (both substances increase the level of endorphins and enkephalins) [1].

We ourselves prepared a scale of measurement and verified it empirically for reliability and validity [31,46,50-53,55,56] to test the withdrawal craving, ranging from 0 to 10 (0 means no craving at all and 10 means severe craving and desire all the time). In addition, we instructed the subject precisely about scoring.

Validated and reliable Craving Scale: 0-1-2-3-4-5-6-7-8-9-10.

We explained the ability of buprenorphine in the reduction of severe alcohol withdrawal craving (craving as such a symptom of amphetamine and opioid addiction, opioid and cannabis addiction). To our knowledge we could not find published clinical trials on this subject (buprenorphine 4 mg daily for the treatment of alcohol craving) in Iran and also globally, so, report of this work can represent a novel finding.

Patient Description

AA was a married, 31-year old college graduate and self-employed. He inhabited with his family in Shiraz city of Fars province in the south area of Iran. He began drinking alcohol at the age of 16. He had been abusing cannabis, methamphetamine, cocaine and benzodiazepine occasionally. Since one year prior to admission (PTA) he has increased the amount of alcohol drinking. He little by little developed depression, suicidal attempts, impulsive behaviors, restlessness, insomnia and agitation. His symptoms were aggravated since few weeks PTA. In short, AA had been a daily heavy alcohol drinker when he was brought to psychiatric hospital.

In detailed psychiatric interview and precise examinations he was very depressed, suicidal, impulsive, restless and agitated. In exact physical and neurological examinations we could not detect any abnormal findings.

Urine drug screening tests were positive for cannabis, methamphetamine and benzodiazepine. Tests of serology for HIV and hepatitis were normal. According to DSM-5 criteria, and also complete medical, psychiatric, and substance use history he was diagnosed as "alcohol induced depressive disorder with severe use disorder". We administered chloridiazepoxide 20 mg valproate 600 mg, olanzapine 15 mg and chlorpromazine 100 mg daily to treat impulsivity, insomnia, agitation, anxiety, restlessness, and depression.

After five days although his symptoms improved significantly, however, he developed alcohol withdrawal craving. So we administered a low dose of buprenorphine (4 mg daily) to reduce severe alcohol craving.

Abstract

Background: Although alcohol use disorders and induced disorders are common in the world, however, only few medications, naltrexone, acamprosate, disulfiram, topiramate and baclofen are recommended for the reduction and cessation of alcohol withdrawal craving. Therefore it is required to develop new medications.

Objective: To test the efficacy of low dose of buprenorphine on the reduction or cessation of alcohol withdrawal craving.

Method: To evaluate the competence of four mg of buprenorphine in the treatment of alcohol craving in a case.

Results: Buprenorphine administration was associated with ending of alcohol craving. In addition, buprenorphine was well endured.

Discussion: Our findings demonstrated that buprenorphine has fast-acting and sustained anti-alcohol craving properties. This effect should be replicated in randomized, double-blind, placebo-controlled trials.

Conclusion: To our understanding obvious effect of buprenorphine in this condition has not been issued yet.
withdrawal craving. He was closely interviewed for psychiatric signs and symptoms every day. He was especially monitored and interviewed for alcohol withdrawal craving only, 3 times a day (morning, afternoon, evening). It should be mentioned that before taking buprenorphine he did not report withdrawal craving for any substance except for alcohol. He was discharged after nine days of hospital admission without any significant psychiatric symptoms.

The alcohol craving scores for the nine days of admission were: 1 & 1 & 4 & 10 & 10 (beginning of 4 mg buprenorphine per day) 0 & 0 & 0 & 0 & 0, respectively. Based on the interview and closely monitoring (3 times a day), he experienced much more alcohol withdrawal craving before taking buprenorphine (Mean: 5.2) than after taking buprenorphine (Mean: 0).

**Discussion**

According to the Iranian drug policy if anyone is found to be abusing illicit substances or illegal drugs (tobacco products are legal), such as, marijuana, hashish, benzodiazepines, opioids, ecstasy, methamphetamine, hallucinogens, cocaine or alcohol, they must be directed to the addiction treatment centers or private clinics or psychiatric hospitals to be treated.

Although patient was also on valproate, clonazepam, chlordiazepoxide and imbalance of dependence, it is difficult to conclude that craving reduction was only due to buprenorphine, chlorpromazine however, our work indicates that low dose of buprenorphine is effective in reduction and cessation of alcohol withdrawal craving. Using buprenorphine in this situation has not been reported in the past, and this report is a considerable addition to the literature.

**Conclusions**

Successful effect of buprenorphine 4 mg daily in this situation has not been reported at an earlier time, and our study is an important addition to the literature

**Acknowledgement**

We were on our own.

**Conflict of interests**

Nil

**References**

1. Sadock B, Sadock V, Ruiz P (2105) Kaplan & Sadock’S Synopsis of Psychiatry. Lippincott Williams and Wilkins, Philadelphia (USA).
2. Brian J (1994) Opium and infant-sedation in 19th century England. Health Visit 78: 165-166.
3. Jonnies J (1995) The rise of the modern addict. Am J Public Health 85: 1157-1162.
4. Gill D, Ahmadi J, Pridmore S (2014) Suicide and Gambling on the Public Record. Malaysian J Psychiatry 2: 81-88.
5. Ahmadi J, Kamel M, Ahmed MG, Bayoumi FA, Moneenum A (2012) Mental Health of Dubai Medical College Students. Iran J Psychiatry Behav Sci 6: 79-83.
6. Ahmadi J, Kamel M, Ahmed MG, Bayoumi FA, Moneenum AA (2008) Dubai Medical College students’ scores on the Beck Depression Inventory. Iran Red Crescent J 10: 169-172.
7. Pridmore S, McNemery G, Ahmadi, Rybak M (2007) Enlarged Virchow-Robin Spaces in a psychotic woman. J Psychiatr Intens Care 3: 49-54.
8. Pridmore S, Ahmadi J, Evenhuis M (2006) Suicide for scrutinizers. Australas Psychiatry 14: 359-64.
9. Pridmore S, Ahmdji J (2010) Two cases of ‘Type 3’ suicide. Australas Psychiatry 18: 426-430.
10. Pridmore S, Brune M, Ahmadi J, Dale J (2008) Echopraxia in schizophrenia: Possible mechanisms. Aust N Z J Psychiatry 42: 565-571.
11. Pridmore S, Ahmed J, Reddy A (2012) Suicide in the absence of mental disorder. Working paper of public health 6: 1-11.
12. Pridmore S, Ahmadi J, Majeez ZA (2011) Suicide in Old Norse and Finnish Folk stories. Australas Psychiatry 19: 322-324.
13. Pridmore S, Ahmadi J (2011) Usage of download of psychiatry by Muslim Countries. Bulletin of Clin Psychopharmacol 21: 174.
14. Pridmore S, Ahmadi J (2015) Psalm 137 and Middle Cerebral Artery Infarction. ASEAN J Psychiatry 16: 271.
15. Pridmore S, Ahmadi J (2005) Status anxiety. Aust NZ J Psychiatry 39: 205-206.
16. Ahmadi J, Ahmadi N, Soltani F, Bayat F (2014) Gender differences in depression Scores of Iranian and German medical students. Iran J Psychiatry Behav Sci 8(4): 70-73.
17. Mackay-Smith M, Ahmadi J, Pridmore S (2015) Suicide in Shooting Galleries. ASEAN J Psychiatry 16: 50-56.
18. Khademhosseini Z, Ahmadi J, Khademhosseini M (2015) Prevalence of Smoking, and its Relationship with Depression, and Anxiety in a Sample of Iranian High School Students. Enliyen: Pharmacovigil Drug Saf 1: 005.
19. Ahmadi J, Sahraian A, Shariati S (2015) Homicidal patient with major depressive disorder companion with opium dependence: A new arcade. Int J Res Rep 1: 1-5.
20. Ahmadi J (2015) Heroin Dependency Treatment: A New Approach. J Addict Depend 1: 1-3.
21. Ahmadi J (2015) Hashish-Induced Olfactory Hallucination: A Novel Finding. J Psychiatry 18: 330.
22. Ahmadi J (2015) Excellent Outcome of Psychosis Induced by Methamphetamine Intoxication after 20 Sessions of Electro Convulsive Therapy. J Addict Depend 1: 1-2.
23. Ahmadi J, Ekramzadeh S, Pridmore S (2015) Remission of Methamphetamine-Induced Withdrawal Delirium and Craving after Electroconvulsive Therapy. Iran J Psychiatry Behav Sci 9: e1793.
24. Ahmadi J, Sahraian A, Dastgheib SA, Moshirni E, Bazrafshan A (2015) Treatment of heroin abuse. Sch Acad J Biol Sci 3: 966-968.
25. Ahmadi J, Sahraian A, Dastgheib SA, Mani A, MowlA A et al. (2015) ECT and methamphetamine psychosis. J Int Res Med Pharm Sci 7: 51-53.
26. Ahmadi J (2015) Tramadol Dependency Treatment: A New Approach. J Addict Med Ther Sci 2: 41-43.
27. Ahmadi J, Dehghanian I, Razeghian Jahromi L (2015) Poly substance induced psychosis. Sch J App Med Sci 3: 2693-2695.
28. Ahmadi J, Dehghanian I, Razeghian Jahromi L (2015) Substance induced disorder. Sch J App Med Sci 3: 2700-2703.
29. Ahmadi J, Pridmore S, Ekramzadeh S (2015) Successful Use Of Electro Convulsive Therapy in the Management of Methamphetamine Induced Psychosis with Onset During Intoxication. J Addict Depend 1: 1-3.
30. Ahmadi J (2015) The Effect of Buprenorphine and Bupropion in the Treatment of Methamphetamine Dependency and Craving. Br J Med Med Res 10: 1-4.
31. Ahmadi J, Sahraian A, Dastgheib SA, MowlA A, Ahmadzadeh L (2015) Management of Methamphetamine-Induced Psychosis by 8 sessions of ECT. Sch J App Med Sci 3: 1565-1566.
32. Ahmadi J, AmirI A, Ghanizadeh A, Khademhosseini M, Khademhosseini Z, et al. (2014) Prevalence of Addiction to the Internet, Computer Games, DVD, and Video and Its Relationship to Anxiety and Depression in a Sample of Iranian High School Students. Iran J Psychiatry Behav Sci 8: 75-80.
33. Ahmadi J, Soltani F, Tabatabaee F, Gozin Z, Ahmadi S, et al. (2014) Substance Use Disorders in Patients With Lung or Heart Diseases. Sch J App Med Sci 2: 111-120.
34. Ahmadi J, Sharifi M (2013) Lifetime and Current Prevalence of Tobacco Smoking. 2013 J. Addict Res Ther 4: 145.
35. Ahmadi J, Ahmed MG (2013) Dubai Medical College Students’ Attitudes towards Substance Use. J Addict Res Ther S6: 005.
Citation: Ahmadi J (2016) Alcohol Withdrawal Craving Treatment with Low Dose of Buprenorphine: A New Experience. J Psychiatry 19: 387.
doi:10.4172/2378-5756.1000387

36. Ahmadi J, Keshtkar M, Pridmore S (2011) Methamphetamine induced Syndromes: A Case Report. J Psychiatry 3: 130.
37. Ahmadi J, Ahmadi M, Pridmore S (2015) Alcohol use in male population of Sanandaj city. J Addict Med Ther Sci 1: 04-06.
38. Ahmadi J, Sahraian A, Shariati S (2015) Delusional disorder joined with opioid dependence. Sch J Appl Med Sci 3: 338-342.
39. Ahmadi J, Talaei A, Ahmadi S, Ahmadi F, Pridmore S (2016) Treatment of an obesity opioid dependent with a single dose of 80 mg of buprenorphine: a new opening. Int J Res Rep 2(1):11-18.
40. Ahmadi J, Ahmadi M, Pridmore S, Porter J, Ghanizadeh A, et al. (2015) A new path for treatment of obesity opioid dependent patients with electroconvulsive therapy. J Harmony Res Med and Hlth Sci 3: 44-50.
41. Ahmadi J, Talaei A, Ahmadi S, Ahmadi F, Pridmore S (2016) Treatment of heroin dependence with 40 mg of buprenorphine: a novel passageway. Int J Original Res 2: 68-73.
42. Ahmadi J, Ghafoori F, Rahimi S (2015) Management of heroin addiction with clonidine, baclofen and a single dose of buprenorphine. J Addiction Prevention 4: 3.
43. Ahmadi J (2016) Combination of analgesics (NSAIDS), baclofen, clonidine and a single dose of buprenorphine for heroin detoxification. Int J Pharma Sci Res Vol 7: 92-96.
44. Ahmadi J (2016) Fast Treatment of Methamphetamine Related Anxiety and Depressive Disorders: A Novel Approach. Addict Med Ther Sci 1: 01-03.
45. Ahmadi J, Talaei A, Ahmadi S, Ahmadi F, Pridmore S (2016) Treatment of heroin dependence with 55 mg of buprenorphine for the treatment of heroin dependence: a new result. Ann of Behav Sci 2: 21.
46. Ahmadi J, Talaei A, Ahmadi S, Ahmadi F, Pridmore S (2016) Single dose of 68 mg of buprenorphine for Methamphetamine induced Persistent Psychosis. J Add Pre Med 1: 103.
47. Ahmadi J (2016) Recurrent psychoses related to methamphetamine. J Harmony Res Med and Hlth Sci 3: 51-55.
48. Ahmadi J (2016) Misuse of tablets of ephedrine, adult cold and cold stop to get high: A distinguished enigma. Int J Res Rep 2: 30-35.
49. Ahmadi J (2016) Methylphenidate in the treatment of methamphetamine induced Persistent Psychosis. J Add Pre Med 1: 103.
50. Ahmadi J, Ahmadi M, Pridmore S, Porter J, Ghanizadeh A, et al. (2015) A new path for treatment of obesity opioid dependent patients with electroconvulsive therapy. J Harmony Res Med and Hlth Sci 3: 44-50.
51. Ahmadi J (2016) Combination of analgesics (NSAIDS), baclofen, clonidine and a single dose of buprenorphine for heroin detoxification. Int J Pharma Sci Res Vol 7: 92-96.
52. Ahmadi J (2016) Fast Treatment of Methamphetamine Related Anxiety and Depressive Disorders: A Novel Approach. Addict Med Ther Sci 1: 01-03.
53. Ahmadi J, Talaei A, Ahmadi S, Ahmadi F, Pridmore S (2016) Treatment of heroin dependence with 55 mg of buprenorphine for the treatment of heroin dependence: a new result. Ann of Behav Sci 2: 21.
54. Ahmadi J, Ahmadi M, Pridmore S, Porter J, Ghanizadeh A, et al. (2015) A new path for treatment of obesity opioid dependent patients with electroconvulsive therapy. J Harmony Res Med and Hlth Sci 3: 44-50.
55. Ahmadi J, Talaei A, Ahmadi S, Ahmadi F, Pridmore S (2016) Treatment of heroin dependence with 40 mg of buprenorphine: a novel passageway. Int J Original Res 2: 68-73.
56. Das J, Xu S, Pany S, Guillory A, Shah, V, et al. (2013) The presynaptic Munc13-1 binds alcohol and modulates alcohol self-administration in Drosophila. Neuron 71: 152-165.
57. Das J, Xu S, Pany S, Guillois Y, Shih, Y, et al. (2013) The presynaptic Munc13-1 binds alcohol and modulates alcohol self-administration in Drosophila. Neuron 71: 152-165.
58. Pany S, Das J (2013) Alcohol binding to the C1 (A1C)1 domain of protein kinase A. J. Mol. Biol. 375: 260-270.