

Case Report

Delusional disorder joined opioid dependence

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Abstract: Delusional disorder allied with opioid dependence is a proceeding conundrum. The main objective is to portray a patient with delusional disorder affiliated with opioid dependence. In results opioid can persuade exist with delusional disorder. In discussion our findings imply that opioid may evoke delusional disorder or be linked to delusional disorder. In conclusion to our understanding there is not ample information on this issue, and this conclusion might sum up a prominent concept to the literature.

Keywords: Delusional disorder; Opioid

INTRODUCTION

Opioids such as methadone are synthetic preparations of opium. Opium has a long history of medical utilization on the earth [1, 2, 3]. Methadone is a pure agonist of opioid mu receptor [1], but buprenorphine is a partial agonist and has ceiling, hence its use has less possibility of overdose and also has little physical dependence. Methadone and buprenorphine lessen the incidence of HIV and other issues which are consequences of opiate dependence. Methadone is absorbed very well after oral use but buprenorphine is well absorbed after sublingual administration, reaching 60%–70% of the plasma concentration, but poorly absorbed when administered orally [4, 5, 6, 7, 8, 9, 10].

Nowadays, prevalence of physical and mental diseases is ascending in the world [11-30]. Among mental disorders, substance related disorders, especially opioids and stimulants connected disorders are moving up universally. At present, opioids and stimulants associated mental problems are a growing riddle and have caused more referrals to inpatient and outpatient units [31-73].

We are now going to demonstrate a homicidal patient with delusional disorder who slayed his wife. To our understanding, there are not ample published

reports on this matter; hence, this report may disclose a new finding.

CASE PRESENTATION:

We portray a homicidal patient with impression of delusional disorder assorted with opium dependence. The case was a retired married late forty year man with primary school education. He lived with his family in Fars province located in the south of Iran. The patient began smoking opium once a while since 5 years prior to hospital admission, then step by step raised the frequency of opium utilization.

Patient bit by bit developed depression after appearing of a rough compulsive thought of unfaithfulness of his wife 2 years prior to hospital admission. He stepwise developed jealousy and paranoid delusions, suicidal thoughts, irritability, and insomnia. In this 2-year period he was brought to a number of psychiatrists and they advised for admission in psychiatric hospital but he refused to be admitted.

The patient's condition was becoming worse since 5 months prior to admission in which he had a harsh argument with his wife and murdered her with knife. Then he was incarcerated. In jail he took methadone for the treatment of opium dependence.

Since he had suicidal attempts in the prison, he was referred to the psychiatric hospital and was admitted.

During psychiatric interview and mental status examinations he had depressed mood, suicidal thoughts, severe agitation, restlessness, paranoid thoughts and insomnia. In precise physical and neurological examinations there were not, any abnormal findings.

Urine drug tests were positive for methadone and benzodiazepine. Serology tests for viral markers (HIV, HCV and HB Ag) were within normal limit. According to the medical, psychiatric, and substance use history and also DSM-5 criteria, he was initially assumed as major depressive disorder associated or related to opioid dependence.

During admission, he received methadone 15 mg per day for the treatment of opioid withdrawals, sertraline 150 mg, propranolol 20 mg, sodium valproate 600 mg, doxepin 50, lorazepam 1 mg per day for the treatment of depression and agitation.

Since he did not responded well to the prescribed medications, consultation was done with some experts whom their first impression was delusional disorder, followed by major depressive disorder as the second impression.

Electro convulsive therapy (ECT) was started for the treatment of delusion, agitation, suicidal thoughts and depression. In addition to ECT, patient received venlafaxine (extended release form) 225 mg per day and sertraline was discontinued. After taking 11 sessions of ECT, patient's condition became much better.

RESULTS:

Delusional disorder or major depressive disorder could be followed by opium consumption or accompanied with opium utilization.

DISCUSSION:

These findings suggest that opium might bring forth delusional disorder/major depressive disorder or joined delusional disorder/major depressive disorder.

CONCLUSION:

To our knowledge and understanding there is not ample data on this topic, and this conclusion might sum up a distinguished concept to the literature.

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Beforetime fraction of these findings has been adopted for printing elsewhere.

Conflict of interests: None

REFERENCES:

1. Sadock B, Sadock V, Ruiz P; (Editors) Kaplan & Sadock's Synopsis of Psychiatry: Lippincott, Williams and Wilkins, Philadelphia (USA), 2015.
2. Jonnes J; The rise of the modern addict, American Journal of public Health, 1995; 85: 1157-1162.
3. Brian J; Opium and infant-sedation in 19th century England, Health Visitor, 1994; 76: 165-166.
4. Jasinski DR, Pevnick JS, Griffith JD; Human pharmacology and abuse potential of the analgesic buprenorphine: a potential agent for treating narcotic addiction. Archives of General Psychiatry, 1978; 35: 501-516.
5. Ling W, Charuvastra C, Collins JF, Batki S, Brown LS Jr, Kintaudi P, *et al.*; Buprenorphine maintenance treatment of opiate dependence: a multicenter randomized clinical trial. Addiction, 1998; 93: 475-486.
6. Ling W, Rawson RA, Compton MA; Substitution pharmacotherapies for opioid addiction: from methadone to LAAM and buprenorphine. Journal of Psychoactive Drugs, 1994; 26: 119-128.
7. Strain EC, Stitzer ML, Liebson IA, Bigelow GE; Comparison of buprenorphine and methadone in the treatment of opioid dependence. American Journal of Psychiatry, 1994; 151: 1025-1030.
8. Johnson RE, Jaffe JH, Fudala PJ; A controlled trial of buprenorphine treatment for opioid dependence. Journal of the American Medical Association, 1992; 267: 2750-2755.
9. Lewis JW; Buprenorphine. Drug and Alcohol Dependence, 1985; 14: 363-372.
10. Jasinski DR, Fudala PJ, Johnson RE; Sublingual versus subcutaneous buprenorphine in opiate abusers. Clinical Pharmacology and Therapeutics, 1989; 45: 513-519.
11. MacKay Smith M, Ahmadi J, Pridmore S; Suicide n Shooting Galleries ASEAN Journal of Psychiatry, 2015; 16(1): 50-56.
12. Pridmore S, Ahmadi J, Reddy A; Suicide in the absence of mental disorder. Working paper of public health. 2012; 6: 1-11.
13. Pridmore S, Brüne M, Ahmadi J, Dale J; Echopraxia in schizophrenia: possible mechanisms. Aust N Z J Psychiatry. 2008; 42 (7): 565-71.
14. Pridmore S, Robinson J, Ahmadi J; Suicide for scrutinizers. Australas Psychiatry. 2007; 15 (3): 247-8.
15. Ahmadi J, Kamel M, Ahmed MG, Bayoumi FA, Moneenum A; Mental Health of Dubai Medical College Students. Iran J Psychiatry Behave Sci. 2012; 6(2): 79-83.

16. Ahmadi J, Samavatt F, Sayyad M, Ghanizadeh; A various types of exercise and scores on the Beck Depression Inventory. *Psychol Rep.* 2002; 90(31): 821-2.
17. Pridmore S, Ahmadi J, Majeed ZA; Suicide in Old Norse and Finnish folk stories. *Australasian Psychiatry.* 2011; 19(4): 322-324.
18. Ahmadi J, Ahmadi N, Soltani F, Bayat F; Gender differences in depression scores of Iranian and German medical students. *Iran J Psychiatry Behav Sci* 2014; 8(4): 70-73.
19. Pridmore S, Ahmadi J; Two cases of 'Type 3' suicide. *Australasian Psychiatry.* 2010; 18(5): 426-430.
20. Ahmadi J, Toobae S, Alishahi M; Depression in nursing students. *J Clin Nurs.* 2004; 13(1): 124.
21. Ahmadi J, Pridmor S, Fallahzadeh M; Neurotic scores in medical students. *German J Psychiatry.* 2004; 7: 51-5.
22. Ahmadi J; Human and Pain; *Journal of Healthy Society*, 1993; 3(13).
23. Ahmadi J; Behavior therapy and Biobehavior therapy; A comparative view; *Journal of Social Sciences and Humanities of Shiraz University*, Vol.8. No 1 and 2, fall and spring, 1992-3.
24. Ahmadi J; A view on Biobehavior therapy; *Journal of Pulse "Specific for Refreshment of Medical Community"* "Vol.2, November 1992.
25. Ahmadi J; *The Future of Psychiatry, (A novel theory and a new approach)*, Shiraz, Rahgosha Press, Second edition, Shiraz University of Medical Sciences, 1992.
26. Ahmadi J; *Behavior Therapy*, Shiraz, Shiraz University Press, Third edition, 1991.
27. Ahmadi J; *Emotion, Feeling and Non-verbal Communication*, Shiraz, Rahgosha Press, Shiraz University of Medical Sciences, 1990.
28. Ahmadi J; *Obsessive Compulsive Disorder*, Shiraz, Navid Press, Second edition, Shiraz University of Medical Sciences, 1989.
29. Pridmore S, Ahmadi J; Usage of download of psychiatry by Muslim countries. *Bulletin of clinical psychopharmacology.* 2011; 21(2): 174.
30. Ahmadi J; *Human and Bio-behaviorism (A new theory and approach)*, *Journal of Healthy Society*. Vol.3, No.14, February 1994.
31. Sahraian A, Sharifian M, Omidvar B, Javadpour A; Prevalence of substance abuse among the medical students in southern Iran (2010) *Shiraz E Medical Journal*, 2010; 11 (4): 198-202.
32. Ahmadi J; The Effect of Buprenorphine and Bupropion in the Treatment of Methamphetamine Dependency and Craving. *Br J Med & Med Res* 2015; 10 (2): 1-4.
33. Ahmadi J, Sahraian A, Dastgheib SA, Mowla A, Ahmadzadeh L; Management of Methamphetamine Induced Psychosis by 8 sessions of ECT *Sch. J. App. Med. Sci.*, 2015; 3 (3H):1565-1566.
34. Khademalhosseini Z, Ahmadi J, Khademalhosseini M; Prevalence of Smoking, and its Relationship with Depression, and Anxiety in a Sample of Iranian High School Students. *Enliven: Pharmacovigil Drug Saf.* 2015; 1(1):005.
35. Ahmadi J, Amiri A, Ghanizadeh A, Khademalhosseini M, Khademalhosseini Z, Gholami Z *et al.*; 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.* 2014; 8 (2):75-80.
36. Ahmadi J, Soltani F, Tabatabaee F, *et al.*; Substance Use Disorders in Patients with Lung or Heart Diseases. *Sch. J. App. Med. Sci.*, 2014; 2(1A): 111-120.
37. Ahmadi J, Yazdanfar F; Substance use among Iranian university students. *The International Journal of Drug Policy.* 2002; 13(6): 507-508.
38. Ahmadi J, Ahmed MG; Dubai Medical College Students' Attitudes towards Substance Use. *J Addict Res Ther* (2013) S6: 005. doi:10.4172/2155-6105.S6-
39. Ahmadi J, Keshtkar M, Pridmore S; Methamphetamine Induced Synesthesia: A Case Report. *Am J Addict.* 2011; 20: 306.
40. Ahmadi J, Alavi M, Alishahi M; Substance Use Disorders in a Sample of Iranian Secondary School Students. *Social Indicators Research*, 2004; 65(3): 355-360.
41. Ahmadi J, Kampman K, Osline DM, Pettinati HM, Dackis C, Sparkman T; Predictors of Treatment Outcome in Outpatient Cocaine and Alcohol Dependence Treatment. *Am J Addict.* 2009;18 (1):81-86.
42. Ahmadi J, Kamel M, Ahmed MG, Bayoumi FA, Moneenum AA; Dubai Medical College students' scores on the Beck Depression Inventory. *Iranian Red Crescent Journal (IRCMJ).* 2008; 10(3):169-172.
43. Ahmadi J, Benrazavi L, Babaebeigi M, Ghanizadeh A, Ghanizadeh M, Pridmore S; Substance use in a sample of medical patients. *J Psychoactive Drugs.* 2008;40 (3):315-9.
44. Ahmadi J, Kampman K, Dackis C, Sparkman T, Pettinati H; Cocaine withdrawal symptoms identify Type B cocaine dependent patients. *Am J Addict.* 2008 ;17 (1): 60-64.
45. Ahmadi J, Kampman K, Dackis C; Outcome predictors in cocaine dependence treatment trials. *Am J Addict.* 2006;15 (6):434-9.

46. Ahmadi J, Fallahzadeh H, Salami A, Rahman M, Saleh V, Khaghani M, Babaebeigi M; Analysis of opium use by students of medical sciences. *J Clin Nurs*. 2006;15 (4):379-86.
47. Ahmadi J, Sharifi M, Mohagheghzadeh S, Dehbozorgi GR, Farrashbandi H, Moosavinasab M *et al.*; Pattern of cocaine and heroin abuse in a sample of Iranian general population. *German J Psychiatry*. 2005; 8 (1): 1-4.
48. Ahmadi J, Majdi B, Mahdavi S, Mohaghegh M; Mood disorders in opioid dependent patients. *J. Affective Disorders*. 2004; 82: 139-42.
49. Ahmadi J, Maharlooy N, Alishahi M; Substance abuse: prevalence in a sample of nursing students. *J Clin Nurs*. 2004; 13(1): 60-4.
50. Ahmadi J, Naghshvarian M, Afshari R; Opioid abuse in male population referred for mandatory Urine Opioid Screen before marriage in Shiraz Iran. *Iranian J Psychiatry Behav Sci*. 2011; 5(2): 126-30.
51. Ahmadi J, Etmnian H, Javanmardi H; Reasons for cessation of opiate use among Iranian opioids dependants. *Addictive Disorders & Their Treatment*. 2003; 2(1):9-12.
52. Ahmadi J, Sharifi M; Cannabis abuse in Iran. *Irish J Med Sci*. 2003; 172(1):46.
53. Ahmadi J, Arabi H, Mansouri Y; Prevalence of substance use among offspring of opioid addicts. *Addict Behav*. 2003; 28(3): 591-5.
54. Ahmadi J, Rayisi T, Alishahi M; Analysis of substance use by primary school students. *German J Psychiatry*, 2003; 3:56-59.
55. Ahmadi J, Hasani M; Prevalence of substance use among Iranian high school students. *Addict Behav*. 2003; 28(2): 375-9.
56. Ahmadi J, Benrazavi L; Substance use among Iranian physical patients. *The International Journal of Drug Policy*. 2002; 13(6): 505-506.
57. Ahmadi J, Benrazavi L; Substance use among Iranian nephrologic patients. *Am J Nephrol*. 2002; 22(1):11-3.
58. Ahmadi J, Benrazavi L; Substance use among Iranian surgical patients. *The International Journal of Drug Policy* 2002; 13(6): 509-510.
59. Ahmadi J, Benrazavi L; Substance use among Iranian cardiovascular patients. *Eur J Med Res*. 2002; 7(2): 89-92.
60. Ahmadi J, Fakoor A, Pezeshkian P, Khoshnood R, Malekpour A; Substance use among Iranian psychiatric inpatients. *Psychol Rep*. 2001; 89(2):363-5.
61. Ahmadi J, Khalili H, Jooybar R, Namazi N, Mohammadagaie P; Prevalence of cigarette smoking in Iran. *Psychol Rep*. 2001; 89(2): 339-41.
62. Ahmadi J, Khalili H, Jooybar R, Namazi N, Aghaei PM; Cigarette smoking among Iranian medical students, resident physicians and attending physicians. *Eur J Med Res*. 2001; 6(9): 406-8.
63. Ahmadi J, Toobaee S, Kharras M, Radmehr M; Psychiatric disorders in opioid dependants. *Int J Soc Psychiatry*. 2003; 49(3): 185-91.
64. Ahmadi J, Dehghanian I, Razeghian Jahromi L; Poly substance induced psychosis. *Sch. J. App. Med. Sci.*, 2015; 3(7D):2693-2695
65. Ahmadi J, Sahraian A, Dastgheib SA, Mani A, Mowla A, Ahmadzadeh L; ECT and methamphetamine psychosis: *IJMPS*, 2015; 7(1): 51-3.
66. Ahmadi J, Sahraian A, Dastgheib SA, Moghimi E, Bazrafshan A; Treatment of heroin abuse. *Sch. Acad. J. Biosci.*, 2015; 3(11):966-968.
67. Ahmadi J, Ekramzadeh S, Pridmore S; Remission of Methamphetamine-Induced Withdrawal Delirium and Craving After Electroconvulsive Therapy. *Iran J Psychiatry Behav Sci*. 2015; 9(4):e1793.
68. Ahmadi J, Dehghanian I, Razeghian Jahromi L; Substance induced disorder. *Sch. J. App. Med. Sci.*, 2015; 3(7D):2700-2703.
69. Ahmadi J; Excellent Outcome of Psychosis Induced by Methamphetamine Intoxication after 20 Sessions of Electro Convulsive Therapy. *J Addict Depend* 2015 1(2): 1- 2.
70. Ahmadi J, Pridmore S, Ekramzadeh S; Successful Use Of Electro Convulsive Therapy In The Management Of Methamphetamine Induced Psychosis With Onset During Intoxication. *J Addict & Depend*, 2015; 1(1): 1-2.
71. Ahmadi J; Hashish-Induced Olfactory Hallucination: A Novel Finding. *J Psychiatry*, 2015; 18: 330. doi:10.4172/2378-5756.1000330
72. Ahmadi J; Heroin Dependency Treatment: A New Approach. *J Addict Depend* 2015; 1(2): 1-3.
73. Ahmadi J; Tramadol Dependency Treatment: A New Approach. *J Addict Med Ther Sci.*, 2015; 2(1): 001-03.