

Positive Effect of Low Dose of Buprenorphine in the Treatment of Severe Hashish Withdrawal Craving: An Original Article

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Abstract

Background: Hashish abuse and hashish induced disorders are common globally.

Objective: The goal is to describe the effect of low dose of buprenorphine on the treatment of severe hashish withdrawal craving.

Method: We assess the competence of buprenorphine in the reduction of hashish withdrawal craving.

Results: Administration of four mg of buprenorphine per day is very valuable in the reduction of severe hashish withdrawal craving.

Discussion: Our findings indicate that low doses of buprenorphine is beneficial in the treatment of severe hashish withdrawal craving. This is a fascinating result.

Conclusion: To our knowledge positive effect of four mg of buprenorphine per day in these situations has not been published yet, and this finding is a significant addition to the literature.

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Introduction

At the present time the incidence of psychiatric disorders is growing^[1-18]. Regarding psychiatric diseases, substance induced disorders, especially stimulants induced disorders have been considered as progressive problems^[19-32].

In the past times, cannabis and methamphetamine were illegally smuggled in from other parts of the world, but now it is prepared illegally in Iran^[24,25,31,32]. 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. The approved FDA use of buprenorphine is for the treatment of pain and opioids withdrawal^[1].

We are now using buprenorphine as a new approach for the treatment of severe hashish withdrawal craving, because we theorize that (our rationale) biochemistry involved in opioid dependency is mostly similar to that of cannabis (both groups enhance the level of endorphins and enkephalins)^[1].

We ourselves made a scale and verified it empirically for validity and reliability (32) to assess the withdrawal craving according to DSM-5 criteria for hashish craving, ranging from 0 to 10 (0 means no craving at all and 10 means severe craving and temptation all the time). We also instructed the subject precisely about scoring.

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

We discussed the ability of buprenorphine in the reduction of severe hashish withdrawal craving (craving as such a symptom of opioid and cannabis addiction).



To our understanding and knowledge we could not find controlled published information on this matter (buprenorphine 4 mg daily for the treatment of hashish craving) in Iran and also globally. Therefore, report of this case can disclose a new finding.

Patient picture

SS was a single, 29 year old graduate in guide school (middle school) and unemployed. He lived with his parents in Shiraz city of Fars province in South Iran.

SS began irregular smoking of substances mostly cannabis and opioid since 14 years prior to admission (PTA). Since a couple of years PTA he has been a regular abuser of hashish and opioids. He developed restlessness, insomnia, agitation, delusions of persecution, self-talking and suicidal thoughts few weeks PTA. At the time of admission, he was a heavy daily smoker of hashish and also a daily abuser of opioids. In psychiatric interview and examinations he was very restless, agitated and paranoid. In exact physical and neurological examinations we could not find any abnormal findings. Urine drug screening tests were positive for hashish, opioid and benzodiazepine. Serology for HIV and hepatitis were normal.

According to DSM-5 criteria, and also complete medical, psychiatric, and substance use history SS was diagnosed as "cannabis induced psychosis" and was given Na valproate 400 mg, and olanzapine 15 mg daily to treat agitation, anxiety, restlessness and delusion, and also low dose of buprenorphine (4 mg daily) to reduce severe hashish withdrawal craving. He was closely interviewed for psychiatric signs and symptoms every day.

He was especially monitored and interviewed for hashish withdrawal craving only, 3 times a day (morning, afternoon, evening). It should be mentioned that during every day interview he has not reported or experienced any significant opioid or benzodiazepine withdrawal craving. SS was taking medications every day and his hashish craving was getting lower. He was discharged after 22 days of hospital admission.

The hashish craving scores for the 22 days of admission were: 7 & 6 & 6 & 6 (beginning of buprenorphine 4 mg daily) 1 & 1 & 1 & 1 & 0 & 0 & 0 & 0 & 0.33 & 0 & 0.33 & 0 & 0.66 & 0 & 0 & 0.66 & 0.66 & 0, respectively.

Based on the interview and closely monitoring (3 times a day), he experienced much more hashish withdrawal craving before taking buprenorphine (Mean: 6.25) than after taking buprenorphine (Mean: 0.35).

Discussion

Although patient was also on valproate and antipsychotic drugs, however our work indicates that low dose of buprenorphine is effective in reduction and cessation of hashish withdrawal craving. Using buprenorphine in these conditions has not been reported in the past, and this report is a considerable addition to the literature.

Conclusions

Positive effect of buprenorphine 4 mg daily in this situation has not been reported at an earlier time, and our work is a significant addition to the literature. This finding is important.

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Conflict of interests: Nil.

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