

## **Case Report**

### **Treatment of heroin abuse**

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**Abstract:** Heroin abuse is a universal problem. The main objective is to demonstrate the benefits of low doses of clonidine, baclofen and ibuprofen (NSAID) in the management of heroin abuse. The method was to appraise blindly a single patient. In results usage of clonidine 0.3 mg, baclofen 75 mg and ibuprofen 1200 mg per day is very beneficial in the treatment of heroin withdrawal symptoms and craving. Our data display that low dosage of clonidine, baclofen and ibuprofen (NSAID) is very useful in the treatment of heroin abuse. This is an influential finding. In conclusion to author understanding this finding is a substantial addition to the literature.

**Keywords:** Heroin abuse; Baclofen; Clonidine; NSAID.

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#### **INTRODUCTION**

Opium has been used since a long time ago. Opium has a prolong history of medical, social and recreational acceptance in some areas of the world, not only in the opium-producing lands of Asia such as Afghanistan, but during the 19<sup>th</sup> and very early 20<sup>th</sup> centuries, in Europe and North America as well [1, 2].

Heroin is one of the synthetic derivatives of opium and is an agonist of opioid mu receptor [3]. Mental health problems have a lengthy history and have been progressing disorders in the world as well [4-13]. In mental health diseases, substance related disorders, especially opioids and stimulants related disorders have been considered as progressing and developing globally problems. At present, stimulants derivatives and opioids induced psychiatric referrals to outpatient and inpatient centers are growing problem [14-31].

The FDA (Food and Drug Association) approved use of NSAIDS for the therapy of pain and clonidine for the reduction of hypertension and baclofen for the treatment of spasticity [3]. We are now using combination of ibuprofen (NSAID), baclofen, and clonidine as an important method for the treatment of severe heroin withdrawal symptoms and craving.

The author himself prepared a reliable and valid scale to measure the withdrawal craving based on DSM-5 criteria for heroin craving, ranging from 0 to 10

(0 means no temptation and craving at all and 10 means severe wish, craving and temptation all the time).

Craving scale: 0-1-2-3-4-5-6-7-8-9-10. We could not find sufficient and valid controlled published trials on this subject, hence report of this finding demonstrate a new result.

#### **CASE PRESENTATION**

We present a case with heroin use disorder who successfully replied to a combination of ibuprofen baclofen and clonidine. HT was a single, 27 years old unemployed with 5 grade of primary school education. He lived with his parents in city of Shiraz of Fars province which is located in south part of Iran.

Our case started smoking of tobacco and hashish at age of 14. After few years he began smoking of opium, cooked dross and heroin. At the time of admission he was consuming cigarette, opium, cooked dross, heroin, benzodiazepine, methamphetamine and hashish. He had not any history of IV drug abuse. He step by step developed anxiety, irritability, agitation, a hedonia, depression, and paranoid. His symptoms were increased since 1 month prior to admission (PTA) and were admitted in psychiatric ward.

Serology test for viral markers (HIV, HCV and HB Ag) was normal. Urine drug screening tests were positive for methamphetamine, MDMA, cannabis, benzodiazepine and morphine.

In psychiatric interview and examination he appeared paranoid, depressed, agitated and restless. In exact physical and neurological examinations there were not any abnormal findings.

According to medical, psychiatric, and substance use history, and Based on DSM-5 criteria HT was diagnosed as "opioid (heroin), cannabis and tobacco dependent and also opioid induced mood disorder"

We began baclofen 75 mg, and clonidine 0.3 mg per day for the management of heroin withdrawals. We began sodium valproate 400 mg, paroxetine 20 mg and amlorazapine 10 mg daily for treatment of depression and paranoid condition.

We started baclofen 75 mg, ibuprofen 1200 mg and clonidine 0.3 mg per day for the treatment of heroin withdrawal symptoms. Our case complained of symptoms of heroin withdrawals before taking medications.

The mean scores (out of 10) of heroin craving for 8 days of admission were 5, 3.33, 1.66, 1.66, 1, 1, 1, and 1, respectively.

According to the exact monitoring, observation and interview (3 times a day), he reported much more heroin withdrawal symptoms and craving before taking medications than after taking medication. After 8 days of admission, patient was free of withdrawal symptoms and was discharged.

He stopped taking medications at home. Two days after discontinuing medications, he referred to us with moderate withdrawal symptoms. We ask HT to take his medications again.

It should be emphasized that patient's withdrawal symptoms were scored and evaluated 3 times a day (morning, afternoon, evening) by an expert who was not aware of the patient's medications.

Based on the close monitoring, and interview (3 times a day), HT reported much more opioid withdrawals and craving before taking medication than after taking medication.

## DISCUSSION

Our exact interview and close evaluation indicate that ibuprofen 1200 mg, baclofen 75 mg and clonidine 0.3 per day is very effective in the management of heroin withdrawal craving and symptoms.

## CONCLUSIONS:

It is assumed that low doses of ibuprofen, clonidine and baclofen are very effective and useful in

the treatment of opioid withdrawal symptoms. Therefore, this result is a significant addition to the literature.

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