



## CASE REPORT

# Unusual Pregabalin dependence following opioid detoxification: a case report

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## ABSTRACT

A 20 year old unmarried male belonging to high socioeconomic status was initially treated with low dose of Buprenorphine for severe opioid withdrawal. Most of the withdrawal symptoms and signs subsided following the treatment, but few symptoms such as sleep disturbance and mild bodyache persisted after 4 months of detoxification. To alleviate his symptoms, he initially started with 3-4 tablets of pregabalin (75 mg) per day which he could get from the pharmacy without any prescription. He gradually increased the dose day by day. Finally he was taking around 40 tablets per day which is approximately 3000 mg of pregabalin per day. He was admitted in the Psychiatry Department and the pregabalin was gradually tapered. High dose of long acting Benzodiazepines was initiated and he also received few sessions of motivation enhancement therapy (MET) and relapse prevention (RP).

**Keywords:** Abnormal; Unusual; Pregabalin; Opioid; Dependence.

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## INTRODUCTION

Manipur is a Northeastern state of India which has a high prevalence of drug abuse. One of the main reasons for the same is that it shares international boundary with Myanmar, which is a part of the "golden triangle" which includes Myanmar, Laos and Thailand. Golden triangle is considered to be one of the largest opium producers of the world.<sup>1</sup>

Drug dependence is characterized by a strong and excessive desire to take a drug, withdrawal state when not taking the drug, tolerance to the drug, difficulty in controlling drug taking behaviour, inability to derive pleasure in alternative activities and persistent use of drug despite clear evidence of harmful consequences.<sup>2</sup> Pregabalin is a gamma-aminobutyric acid

(GABA) analogue and it reduces the release of numerous neurotransmitters including glutamate, noradrenaline, and substance P.<sup>3</sup> Pregabalin was reported as having very low abuse potential in pre-marketing studies and had a very limited potential for developing addiction even when abused.<sup>4</sup> But recent data and number case reports suggests that pregabalin is associated with increased potential of abuse or addiction in patients with a history of opioid abuse or current opioid addiction.<sup>5-6</sup>

## CASE HISTORY

A 20 years old unmarried male belonging to high socioeconomic status attended psychiatry OPD for the treatment of Pregabalin dependence. He was admitted in male

De-addiction ward for proper assessment and management. Detailed history revealed that he had undergone detoxification in the past for Heroin dependence with low dose of Buprenorphine. His treatment was completed 4 months ago and most of the withdrawal symptoms and signs subsided following the treatment. However few symptoms such as sleep disturbance and mild body ache persisted even after initial few days of detoxification. To alleviate his symptoms, he initially started with 3-4 tablets of pregabalin (75 mg) per day which he could get from the pharmacy without any prescription. He was feeling good and most of his symptoms also improved with pregabalin. He could sleep well and felt something great happening inside his head. He gradually increased the dose day by day. Finally he was taking around 40 tablets per day which is approximately 3000 mg of pregabalin per day. He tried to decrease and stop using tab pregabalin by himself but failed and hence came to Department of Psychiatry, RIMS.

### INVESTIGATION

Complete hemogram, LFT, KFT, RBS, urine R/E, TFT and ECG was within normal limits. Hepatitis B, C, HIV was non reactive.

### TREATMENT

High dose of long acting Benzodiazepines was initiated and his dose of pregabalin tapered gradually and stopped altogether within 14 days of treatment. He also received few sessions of motivation enhancement therapy (MET) and relapse prevention (RP) therapy from the psychologists.

He was started on tab Clonazepam 2mg/day in divided doses and Tab Zolpidem 12.5 mg at bed time. Tab clonazepam was tapered over a period of 15 days and then stopped. The hospital stay was uneventful except some restlessness, sleep disturbance in the initial days. He also received sessions of motivation enhancement therapy and relapse prevention counseling and he was discharged after 16 days.

### DISCUSSION

Pregabalin is an analogue of the neurotransmitter gamma aminobutyric acid (GABA) that selectively bind to the  $\alpha 2-\delta$  subunit of voltage-gated calcium channels in central nervous system neuronal tissues.<sup>1</sup> They inhibit the release of excitatory neurotransmitters resulting in the antinociceptive, anticonvulsant, anxiolytic and sleep-modulating activities. So they may be used to achieve euphoric and dissociative effects. Pregabalin is also approved for the treatment of neuropathic pain, partial seizure and generalized anxiety disorder. As a GABA analogue there is a raising concern regarding the abuse potential of this drug.<sup>7</sup>

Drug addiction remains a widespread and fatal disease worldwide that results in serious social and economic impacts. Recent studies suggest that illegal pregabalin use may be increasing among young people, however the addictive

potential of pregabalin is not properly established and there are less documented cases of pregabalin abuse.<sup>8-9</sup>

There are as such no guidelines for the treatment for pregabalin abuse or dependence. As benzodiazepines results in increase in the effect of neurotransmitter GABA at GABAA receptor and as pregabalin is an analogue of neurotransmitter GABA, detoxification was tried by using tab clonazepam.

### CONCLUSION

The case highlights the illicit dispensing practices in the state. Improper regulation of drugs result in indiscriminate dispensing by pharmacists. Physicians should also be aware of the addictive potential of pregabalin and prescribe it with caution, more so in patients with a previous history of substance abuse.

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