



# Iatrogenic skin popper: tramadol dependence in a patient with no previous substance history

## Abstract

Tramadol, a synthetic codeine analogue having a weak  $\mu$  receptor agonist action has been widely used for relief of mild to moderate pain. Most commonly, tramadol addiction or abuse is reported among doctors or people with previous history of drug abuse. However, rare cases of tramadol dependence have been described in patients without prior substance abuse history. We are describing one such case of a 35-year-old male who presented with history of using injection tramadol regularly for three years where there was no prior history of drug abuse but who was prescribed tramadol for medical reason. The frequency of one ampule of tramadol increased from once in two to three days to almost daily up to 12-14 ampules/day. The management was a serious challenge. We admitted the patient for inpatient detoxification. He required tramadol injections to manage his withdrawal symptoms, along with lorazepam and clonidine which were gradually tapered over a period of 14 days. This case highlights that tramadol dependence though very rare but still can happen in a patient without substance abuse history. Also, the physician should be aware of the abuse potential of tramadol and should keep in mind short and judicious prescription, and educating the person regarding the risk of abuse can help to minimise this debilitating and sometimes fatal addiction.

**Keywords:** Substance Abuse. Opioid. Chronic Pain.

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## INTRODUCTION

Tramadol has been widely used for relief of mild to moderate pain. Tramadol, a synthetic codeine analogue having a weak  $\mu$  receptor agonist action has its analgesic effect due to inhibition of uptake of norepinephrine and serotonin.[1] Tramadol is generally not considered to have substantial risk of dependence and abuse. Tramadol abuse or addiction is mainly reported among physicians or people with previous history of drug abuse.[2,3] However, rare cases of tramadol dependence have been described in patients without prior substance abuse history.[4]

## CASE REPORT

Mr. M, a 35-year-old male, presented with history of using injection tramadol regularly for past three years. Three years back, a general local practitioner prescribed him injection tramadol for abdominal pain. The chronic abdominal pain was secondary to his past history of abdominal tuberculosis. The pain was relieved immediately but used to recur. The doctor would give him one ampule of tramadol whenever there was pain, i.e. once in two to three days for initial one year. After one year, he started injecting himself and more frequently, i.e. almost daily. He would take 12-14 ampules/day. He would inject wherever he could find any vein. He then developed abscesses all over the body. He used to pop these abscesses which resulted in circular depressed scars. During

the last year, he had no abdominal pain but would have intense desire to take tramadol injection. He would have withdrawal symptoms in the form of severe bodyaches, tremors of hands, palpitations, restlessness, lack of interest to do any work, and insomnia. There was no history of needle sharing, high-risk sexual behaviour, engagement in criminal activity, or use of any drugs. There was no history of substance abuse in his past or in his family members. There were no significant interpersonal problems with his wife or family members. There was no other comorbid psychiatric disorder.

Complete blood count (CBC), kidney function test (KFT), liver function test (LFT), and random blood sugar (RBS) were normal. Urine toxicological analysis did not reveal the presence of any other substance. His results were negative for human immunodeficiency virus (HIV), hepatitis B, and hepatitis C. Nothing abnormality was detected in electrocardiography (ECG) and non-contrast computed tomography (NCCT Brain).

Mr. M was admitted for inpatient detoxification. He had severe withdrawal reaction due to which he was restarted on injection tramadol, the dose of which was regulated and gradually tapered down from three ampules in a day to half ampule in a day and then stopped in total duration of 14 days. His other withdrawal symptoms were managed with lorazepam and clonidine. After one month of inpatient treatment, he did not require any more tramadol and was sent

home. He was doing well with no reported tramadol injection during the short follow-up period of two months.

## DISCUSSION

The newer opioids such as tramadol and dextropropoxyphene are extensively used by doctors for alleviation of moderate to severe pain in view of their relatively better safety profile and lower abuse potential. The risk of abuse is high in people with history of substance addiction, chronic pain, and in healthcare workers.[5] Tramadol dependence though very rare but still can happen in a patient without substance abuse history. Tramadol dependence should be treated, ideally on inpatient basis, with nonsteroidal analgesics for managing the opioid withdrawal symptoms. Low doses of tramadol may also be used in gradually tapering manner if needed. Due attention has to be paid to any medical comorbidities and the patient should also be appropriately counselled.[2,6] So far, there is a lack of evidence-based treatment guidelines.

Tramadol dependence risk is high as it is not a scheduled medication unlike other opioid medications and hence, can be easily procured. In India, the poorly monitored dispensing practices in medical shops and dispensing without prescription further increases this risk.[7,8] In addition to its abuse potential, there is a risk of overdose leading to seizure as well as respiratory depression which can be fatal as in the case of other opioids.

This case report highlights the fact that an effective painkiller can be misused and the physician should be aware of the abuse potential of tramadol. An efficient check for past or family history of substance addiction, short and judicious prescription along with good follow-up, and most of all, educating the person regarding the risk of abuse can help to minimise this debilitating and sometimes fatal addiction.

## Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his/her consent for his/her images and other clinical information to be reported in the journal. The patient understands that his/her name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

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