



The role of cultural interaction in Tianeptine Abuse and Different Tianeptine Application Methods

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Tianeptine is a selective serotonin reuptake enhancer, possessing strong antidepressant and anxiolytic properties. Its relative lack of sedative, anticholinergic and cardiovascular side effects makes it a highly tolerable substance of abuse. However, physical dependence quickly develops and withdrawal symptoms are common. Abusers in Georgia and Armenia use tianeptine by intravenous injection. Drug abusing behaviour usually starts during puberty, since it stems from psychological, social and cultural circumstances. Sociodemographic studies show that drug abusing behaviour in Turkey varies according to region and substance. This paper investigates differences between Georgian foreigners and the local population in the eastern Black Sea region in terms of tianeptine abuse and discusses complications resulting from intravenous injection of tianeptine.

Key Words: Tianeptine, drug abuse, intravenous injection, complication

Introduction

Substance abuse is gradually becoming more common despite various preventive measures particularly in the developing countries, and is an important issue for public health in Turkey as is all over the world. Substance abuse generally begins in the adolescent period and psychological, social and cultural effects play an important role (1). Previous studies reveal that substance abuse in Turkey shows increasing variation according to geographical regions and the type of substance (2, 3).

Tianeptine is an antidepressant agent having similar effects with serotonin reuptake enhancers. In addition to its cognitive effect that enhances attention and learning, it has also anxiolytic effect similar to that of tricyclic and tetracyclic antidepressants. It has been reported that some cases develop tolerance to tianeptine, and the drug is frequently consumed at higher doses because of high tolerability and as the patient feels himself/herself strong and thus causes physical signs of abstinence in case it is not available (4).

In this paper, substance addiction of the workers that came to Turkey from Georgia, the different ways of tianeptine use they taught to young Turkish citizens they became friends with, and also the risks, are discussed along with three cases.

Case Reports

Case 1

A 30-year-old male, foreign field worker was found in an unconscious state in his room after lunch and was brought to the emergency room. The patient was unconscious with no eye opening and verbal response, but minimal response to painful stimuli, and his pupils were isochoric and miotic. His arterial blood pressure was 100/60 mmHg and heart rate was 54 beats min⁻¹. Spontaneous respiration was insufficient and irregular. Anamnesis obtained from his friends revealed no history of trauma or chronic disease. It was learned that he has been using tianeptine (Stablon®) for the last few years for his psychiatric problems, and that an injector and the drug box was found near him at the time of event. There was an injection mark on his arm, but the dose of the drug was indefinite. The patient was intubated and was transferred to the intensive care unit for further analysis and treatment. Naloxone was administered, and the patient was extubated after mechanical ventilation support for 2 hours, and he was discharged the day after. The friends of the patient avoided giving detailed information, as they were reluctant to involve in a judicial event. They only told that the patient has been using tianeptine, sometimes via the intravenous route.

Case 2

A 32-year-old male patient, who had been receiving tianeptine for the last 2 years after using heroin for 4 years and also consuming alcohol occasionally, told that he has been using tianeptine as was described by his foreign co-workers. He has been receiving 4 boxes (240

tablets, 3000 mg) of drug daily in the recent times. He told that he washed the drug with cold water first, then kept it in hot water for a while until it became soft, thereafter mashed and dissolved the drug. He then injected the drug, which he obtained by filtering the solution through a gauze, into the femoral vein. He told that he had been having pleasure with this application before, but no more, and now he could only fall in deep sleep for 4 hours. In the recent times, whenever he saw a pharmacy, he could not keep himself from buying this drug as much as his money can buy. The patient, who had used all peripheral veins in time, had finally begun to use femoral veins for injection. He was admitted to the hospital with abscess and pain in the left femoral vein and uncontrolled bleeding. He underwent surgery due to pseudoaneurysm in the femoral vein diagnosed with preoperative tests and procedures.

Case 3

The patient, who had been using tianeptine via intravenous route, was admitted to our hospital with extensive ecchymosis, increased heat and pain in the left leg. On his physical examination, peripheral pulses were not palpable. The patient refused to undergo required analyses despite he has been informed about the importance of the situation and left the hospital. Later on, it was learned that he died due to the complications resulted from clinical deterioration.

Discussion

Georgian citizens pass through our region for both commercial and touristic purposes. Their communication with our citizens is inevitable as they stop for accommodation or settle for months. Tianeptine has been named as "Georgian drug", as the Georgian citizens buy this drug frequently and in large amounts because prescription is not obligatory in our country.

Many studies determined that young people are addicted to substance abuse by the users in their family and friends (5). In this paper, we tried to demonstrate that friends, who use different ways for taking the substance, enhance the risk of substance abuse, and that the method-related risks extremely endanger the subjects' health.

Antidepressants and antipsychotics are used in the treatment of abstinence syndrome in substance abusers (6-8). However, as was in the present series, drug addiction develops as the patients' tolerance to the drug is enhanced, and they begin to use the drug at gradually increasing doses and in different ways.

Deaths due to substance abuse may result not only from accidents or using the drug for suicidal purposes, but also indirectly from infections, sepsis and misapplication of the drug (thrombophlebitis etc.) (9). The third case refused the treatment despite being informed about life-threatening condition and died after a short time. Our first case required mechanical ventilator support was as the amount of drug he used was not known. Late and overlooked cases have the risk of death at the event scene.

Effects of tianeptine resemble the bodily and mental well-being seen in heroin use. Tolerance occurs even with a single use, the subject feels himself/herself strong, increases the dose continuously, and signs of physical abstinence appear in case the drug is not received (10). In the second case, the patient could not keep himself away from buying the drug whenever he passes by a pharmacy or even sees the signboard. As the patients obtain the drug in tablet form, they inject it into their bodies via inappropriate methods through peripheral veins regardless of the rules of asepsis.

Some studies stated that high dose of tianeptine is well-tolerated, insignificant and temporary adverse effects such as itching, constipation, poor appetite, weight loss, impaired sleep, abdominal pain, difficulty in urinating, and behavioural disorders may be seen initially, but the abuser insists on using the drug due to its pleasure-inducing effect (10). The stimulating and pleasure-inducing effect of tianeptine and its tolerability even at high doses lead the abuser to continuously increase the dose and be dissatisfied with oral ingestion. Dependents that have no difficulty to obtain tianeptine do not consider the adverse effects and the need for gradually increasing doses as a problem.

Tianeptine abuse is an issue that should be carefully handled in subjects with a history of alcohol and substance abuse. Using tianeptine in the treatment of another substance addiction may pose the risk of tianeptine addiction (4).

Most of the previous studies revealed that peer effects are important environmental risk factors for the development and maintenance of substance abuse (11-14). As was expressed in the present study, friendship between people from different cultures brings along different ways of substance abuse and widens the range of potential complications. Ease of access to the drugs leads the wannabe and those who want to experience the substance result in substance addiction.

Conclusion

Antidepressants can be easily obtained from any health institute with prescription, or even can be purchased from the pharmacies without prescription. It should be taken into account that high doses of these drugs, which are obtained in an uncontrolled manner, may cause severe adverse effects, thus uncontrolled sale of these drugs should be prevented. As is understood from the present cases, the drugs, which can be abused, should be determined and these drugs should not be sold without prescription.

Substance abuse, which is encountered frequently, intoxications and related deaths stand out as a medical and judicial problem. With this paper, we aimed to share our experience on tianeptine abuse and to increase the awareness of the society on this issue.

Conflict of Interest

No conflict of interest was declared by the authors.

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