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CASE REPORT

Effect of Using Tramadol on Shoulder Dislocation

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Abstract

Background: One of the side effects of tramadol is seizure. Tramadol is a synthetic analgesic used to treat mild to moderate pain. Tramadol can cause seizures in the range of treatment and toxic doses. This seizure is usually in a generalized tonic-clonic from and usually occurs in the first 24 hours after ingestion.
Case Presentation: The patient was a 32-year-old man referring to the emergency department with a right shoulder joint dislocation. It was reported that after a tonic-clonic seizure for about 1 minute, it has been followed by foaming at the mouth, eye lifting, urinary incontinence and loss of consciousness for about 5 minutes. He used a combination substance of sildenafil and tramadol to treat an early ejaculation. The patient has referred to the hospital 5 times with shoulder dislocation, without providing a detailed explanation about the use of tramadol and subsequent seizures
Discussion: Tramadol misuse and overdose is a common medical issue in Iran and around the world. Regarding the arbitrary use of tramadol in Iran, especially through the non-scientific prescriptions by apothecaries in some cases such as early ejaculation treatment, attention to patient records along with the cause of referral is essential.
Conclusion: Considering the prevalence of tramadol use, the community of physicians is advised to think of tramadol as a common cause for shoulder dislocation.

Keywords: Ejaculation; Seizures; Shoulder Dislocation; Tramadol

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INTRODUCTION

Tramadol mainly acts as a pain reliever with narcotic and non-narcotic features and is broadly utilized to lesson light to average pain (1). Shoulder displacements are the most widely recognized significant joint displacements witness in emergency wards. The most basic sort of this problem is front displacement. Two-sided shoulder displacement is an uncommon condition which quite often occurs in the back. These displacements generally occur during sports games, epileptic convulsions, electrical shocks, or electroconvulsive treatment. Nonetheless, synchronous two-sided-front shoulder displacement is very uncommon and as a rule is of horrendous in essence with just a couple of instances portrayed in the literature (2).

Tramadol is an analgesic drug used in the treatment of mild to moderate pains. The standard dose of tramadol is 50 mg orally per day, 50 mg intravenously, or 100 mg via rectal route. The maximum dose is 400 mg per day (3).

Tramadol intoxication may have some early reactions incorporating central nervous system (CNS) distress, tachycardia and heart failure, breathing distress and failure, convulsion, nerve-muscle indications, excessive constriction of the pupil of the eye, hypotonicity, and breathing acidosis. Perpetual utilization of this medication can prompt adverse reactions such as weariness, unsteadiness, vertigo, cerebral pain, vision impairments, excessive sense of happiness, a state of unease or generalized dissatisfaction with life, and illusion (4).

Seizure is one of the most common side effects of using tramadol in therapeutic doses, abuse, or overuse (3).

Tramadol toxicity and its non-remedial misuse have lately turned out to be common in Iran (4).

One of the new therapies for premature ejaculation is tramadol, a type of synthetic narcotic with a central function that can delay ejaculation with two mechanisms: simulating the M1 receptor or its metabolite, and by inhibiting noradrenaline and serotonin reuptake. Tramadol has long been used without labels for the treatment of premature ejaculation, but its safe and secure nature has not yet been approved, and patients who have been taking tramadol for pain relief reported delay in their ejaculation (5).

As mentioned, one of the side effects of tramadol is seizure. Tramadol is a synthetic analgesic used to treat mild to moderate pain. Tramadol can cause seizures in the range of treatment and toxic doses. This seizure is usually in a generalized tonic-clonic from and usually occurs in the first 24 hours after ingestion. It is more likely to happen in young people, people with long history of drug use, as well as those who consume alcohol at the same time (3).

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CASE PRESENTATION

The patient was a 32-year-old man referring to the emergency department with a right shoulder joint dislocation. It was reported that after a tonic-clonic seizure for about 1 minute, it has been followed by foaming at the mouth, eye lifting, urinary incontinence and loss of consciousness for about 5 minutes. Upon recovering consciousness, he realizes the pain and limitation of the right shoulder movement. No impacts and injuries were observed in other areas including the head and face. His glucose was 95 mg / dl and the arterial oxygen saturation was 96% in the room air. The examination revealed the right shoulder movement limit along with a void in the joint surface. The patient had a history of 4 times spontaneous shoulder joint dislocation with the preceding seizure, which was treated (shoulder setting) by emergency medical staff every time by referring to the hospital. Also, the patient did not mention any previous drug use. No seizure in childhood and the arterial blood gas analysis was normal (Ph = 7.38, Pco2: 45, Hco3 = 21). The patient reported a number of other seizures without shoulder dislocation. However, his first-degree relatives had no seizure history. After setting the shoulder by the orthopedic service, a complementary operation was performed and the shoulder joint was fixed in order to prevent re-dislocation. A CT scan was also obtained based on a neurological consultation and nothing unusual was found. After the release at the time of previous seizures also the patient had been recommended referring to a neurologist, which of course, he has refused every time.

Along with the above consultations, forensic counseling was also performed due to suspicion of seizures and the lack of follow-up on behalf of the patient, as well as the lack of attention to the recommendations for referring to the neurologist. To investigate seizures followed by drug abuse, urine specimen was requested, which showed a positive result regarding the presence of tramadol in the specimen.

By taking a precise biography of the patient, he stated that he was single and had an early ejaculation following a close relationship with a sexual partner. Having searched the apothecaries and the Internet, he used a combination substance of sildenafil and tramadol to treat the problem – in fact, he has misunderstood it completely.

The patient received medical counseling and clinical psychotherapy. Moreover, the necessary recommendations for behavioral therapy were given and the skills required for the treatment of premature ejaculation were trained. He was also asked to stop using tramadol.

The patient was embarrassed to talk about his premature ejaculation. Therefore, it is advisable to speak with the patient and ask about their possible problems in private. Obviously, this should be done in an environment where the patient feels completely relaxed and safe, without the fear of their secret being revealed.

In a period of about 3 years, the patient has referred to the hospital 5 times with shoulder dislocation, without providing a detailed explanation about the use of tramadol and subsequent seizures. The emergency medical and orthopedic staff set his dislocated shoulder each time. In the last visit, however, a urine specimen was requested with the suspicion that seizures may have occurred following the use of tramadol. The use of tramadol was positive. Obtaining a precise history, the patient then stated that he had been taking tramadol occasionally for some time to increase his sexual exertion – which is a wrong belief though.

The patient was a 32-year-old man referring to the emergency department with a right shoulder joint dislocation. It was reported that after a tonic-clonic seizure for about 1 minute, it has been followed by foaming at the mouth, eye lifting, urinary incontinence and loss of consciousness for about 5 minutes. Upon recovering consciousness, he realizes the pain and limitation of the right shoulder movement. No impacts and injuries were observed in other areas including the head and face. His glucose was 95 mg / dl and the arterial oxygen saturation was 96% in the room air. The examination revealed the right shoulder movement limit along with a void in the joint surface. The patient had a history of 4 times spontaneous shoulder joint dislocation with the preceding seizure, which was treated (shoulder setting) by emergency medical staff every time by referring to the hospital. Also, the patient did not mention any previous drug use. No seizure in childhood and the arterial blood gas analysis was normal (Ph = 7.38, Pco2: 45, Hco3 = 21). The patient reported a number of other seizures without shoulder dislocation. However, his first-degree relatives had no seizure history. After setting the shoulder by the orthopedic service, a complementary operation was performed and the shoulder joint was fixed in order to prevent re-dislocation. A CT scan was also obtained based on a neurological consultation and nothing unusual was found. After the release at the time of previous seizures also the patient had been recommended referring to a neurologist, which of course, he has refused every time.

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DISCUSSION

Tramadol misuse and overdose is a common medical issue in Iran and around the world (1). Tramadol toxicity and its non-helpful misuse have turned out to be pervasive in Iran lately. Individuals with tramadol overdose might encounter complications by some neurologic occurrences like seizure (4).

These seizures are more common in young people, as well as long-term users, and those who consume alcohol at the same time (3).

Tramadol consumption is reported to increase in Iran and in the world. According to Iran's Ministry of Health, 24 million 100-mg tramadol pills were sold in Iran between March 2004 and March 2005, which is projected to increase significantly in the current period (3, 6). Regarding the arbitrary use of tramadol in Iran, especially through the non-scientific prescriptions by apothecaries in some cases such as early ejaculation treatment (which has not been scientifically proven), attention to patient records along with the cause of referral is essential. In some cases, the shoulder dislocation, especially the bilateral anterior dislocation, which is rare, is caused due to other causes that the patient does not mention in the early history.

CONCLUSION

Considering the prevalence of tramadol use, the community of physicians is advised to think of tramadol as a common cause for shoulder dislocation. Consequently, in view of the current situation and due to the arbitrary use of tramadol without a prescription, it is desirable to take a history of using tramadol from the patients who refer with a shoulder dislocated. Also, after setting the dislocated shoulder, the patient should be referred to the poisoning clinic for tramadol rehabilitation.

Two-sided front shoulder displacements are the most uncommon type of shoulder displacement. It is vital to take precise clinical records, an exhaustive clinical examination and sufficient imaging so as to diagnose and treat this trauma (2).

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