Hammering Nail to The Head for Suicide; A Case Report And Literature Review

İntihar Amaçlı Kafaya Çivi Çakma; Olgu Sunumu ve Literatürün Gözden Geçirilmesi

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Abstract

Suicide is the process by which an individual ends his or her own life, and usually methods are chosen to provide sudden death. The most common types are high jump, firearm injuries. However, some forms of suicide can be by unpredictable methods. These can be seen in patients with psychiatric disorders such as severe depression and schizophrenia. The idea of suicide by hammering a nail on the head is not a common occurrence. Because it is a method that can not cause sudden death and cause suffering, beside these, it is not a suicide attempt to finish a single action. We will present the case of a young male patient who suicides with hammering nail method and review the literature in this direction.

Keywords: Hammering nail to head, schizophrenia, suicide

Öz

İntihar insanın kendi hayatına son vermesi işlemidir ve genellikle ölümü aniden getirecek yöntemler seçilmektedir. Bunlardan en sık olanları yüksekten atlama, ateşli silah kullanımıdır. Ancak bazı intihar şekilleri de hiç tahmin edilemeyecek yöntemlerle olabilir. Ağır depresyon, şizofreni gibi psikiyatrik hastalıkları olan hastalarda bunlar görülebilmektedir. Başına çivi çakarak intihar etme düşüncesi de sık görülen bir durum değildir. Çünkü ani ölüm getirmeyecek ve acı çekerek ölüme sebep olabilecek bir yöntemdir ve tek bir hamlede bitirecek bir intihar girişimi değildir. Başına çekiçle çivi çakma usulü ile intihar eden genç erkek hasta olgusunu sunup literatürü gözden geçireceğiz.

Anahtar Sözcükler: Kafaya çivi çakma, şizofreni, intihar

Introduction

Suicide is the process of ending the life of the person which develops in the psychological base. For this reason, the suicide of the person depends on the suicide devices that the person can reach. For that reason, a patient who is firmly committed to suicide may try this in a variety of ways. Although they have different forms of suicide, they usually choose methods that they think they can end the life in one shot. High jump and suicide with firearms are common. The survival rate of traumatic brain injuries with firearms is very low. For this reason, targeting of the skull in cases of suicides with firearms is frequent. It is known that the nail gun, which emerged with the development of the industry, is frequently used for suicide. However, manual nail hammering is extremely rare. There are also factors affecting survival in penetrating nail injuries of

head. Concomitant vascular injuries and hematomas are important for the short term. A long-term cause is also an infection.

Case

The patient was a 21-year old right-handed male. He has two unsuccessful suicidal attempts in his history. He had tried to commit suicide by taking lots of drugs and tried to cut his wrists but could not succeed. He has decided to commit suicide by hammering a nail into his head. He has performed hammering a nail to his head byself (Figure 1). He was conscious when he was brought to emergency service. There was no neurologic deficit, except for slight right hemiparesia (4/5). Head of the nail was seen on the scalp of the left frontoparietal region. Nail, which was 10cm in length, was seen on the plain

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X-ray. Route of the nail on the computed tomography (CT) was seen in the left frontoparietal region (Figure 2).

The patient was taken to surgery immediately. Under general anesthesia, A burr hole was opened near the side of the nail and the nail head was appeared by making a circumferential small craniectomy, and the craniotomy flap was elevated. After opening the duramater, the nail was removed in a controlled way. The route was checked and when there was no parenchymal bleeding, duramater was closed with primary repair. A follow up CT showed the route of the nail with minimal hemorrhagic contusion (Figure 3). There were no postoperative complications. His neurologic deficit disappeared dramatically. The patient was sent to psychiatry department. The patient who had been treated at the psychiatric department for a period of 1 month was discharged and attempted suicide again by high jump at the third month of post-discharge and lost his life.

Discussion

Injuries with penetrating objects like pens, pieces of wood, knitting needles, knives or other kinds of material are rather common in the literature (1-3). However, injuries with penetrating objects with suicidal purposes are small in number in the literature. Most of these injuries are with automatic machines. Manual and self inflicted penetrant brain injuries are less. In the literature, penetrating brain

injuries are encountered with nail, screw, awl and wire for suicide attempts (4-6). Suicide attempts with nails have often been with nail guns. There are very few cases of nailing with hammer in these. To our knowledge, there are only five publications observed with nail hammering (7-11). The reason for such a small number is that the suicide in this way is exactly the desire for suicide, the difficulty, the necessity of using both hands and the necessity of continuing the attempt with enduring pain. There are also cases of penetrating brain injuries as punishment with nails.

In the literature, it is seen that patients who attempt suicide in this way usually have psychiatric disorders and have repeatedly attempted suicide. As a matter of fact, our case has attempted suicide 4 times in total and lost his life in the last. Our patient has been treated with the cause of severe schizophrenia and has left his treatment unfinished. These patients, who seem determined to commit suicide, can choose different methods in spite of all kinds of difficulties. Our patient also has learned from internet that the dominant hemisphere of the brain was on the left side frequently and then hammered the nail to the left side of head. Ease of access to all kinds of information can also enable them to be used in some negative directions.

CT is the most useful tool for penetrating brain injuries in terms of diagnostic methods. It is stated that MRI can benefit in injuries caused by non-magnetic materials. Although some texts indicate that X-ray graphs may be useless, it is easier to understand the size and route of these materials in X-ray. If the equipment is adequate in terms of vascular injury, angiography may give more healthy results (12).

Direct removal of the screw as a surgical treatment, removal by craniotomy or craniectomy is still controversial. We recommend to perform a tiny craniectomy around the penetrant substance and then make a mini craniotomy like a ring with leaving the material in the middle under general anesthesia. After the craniotomy is performed, the duramater is opened around the penetrant and the material is pulled in a controlled manner. In this case, the bleeding point, which may occur intracerebrally, can be seen and intervened immediately. In addition, the

Figure 1. Demonstration of suicide attempt

Figure 2. The route of nail in the head is seen

Figure 3. The hemorrhagic contusion field can be seen after removal of nail

necrotized tissues, and the bone tissue that is pulsed inward, can be debrided.

Care should be taken in terms of early and late complications, and if there is a cortical injury, antiepileptic treatment should be started immediately. In terms of CSF fistula, the duramater should be closed in a watertight manner and wide spectrum antibiotherapy should be initiated. Tetanus prophylaxis should be performed. It is suggested that when the clinical stabilization of the patients is provided, patients should be transferred to the psychiatric service for treatment of the psychiatric disorder.

Cranial nail injuries are extremely rare and should be treated with caution in the radiological evaluation, in the surgical treatment, in the management of the underlying psychiatric disorder and subsequent observation period of the patient.

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