



# The Bulletin of Legal Medicine

## Adli Tıp Bülteni

Case Report

### Suicide with Like Hara-kiri Method: A Case Report

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**Abstract:** Suicide is defined as “a person’s giving an end to his own life due to emotional, psychological, or social effects”. Many factors such as cultural structure, ethnic group, age, gender and accessibility are effective in the choice of suicide method. The most common suicide method is hanging, followed by firearms, jumping from heights and chemical intake. While the suicide with the sharp instruments constitutes %2 of all suicides, the incidence of suicide with the sharp instruments which is similar to Hara-kiri is % 0.2. What makes our case valuable is that the person belongs to the Turkish race and has chosen a suicide method as hara-kiri that is special to the Japanese race. A 56-year-old man diagnosed with psychotic disorder died of peritoneal, small intestine and mesenteric injuries due to abdominal and chest penetrating stab wounds and hypovolemic shock due to bleeding.

Our case is compatible with similar cases in the literature in terms of age and sex. In addition, the presence of a known psychiatric diagnosis and history of suicide attempts were significant.

As a result, suicide with hara-kiri method is not common and it is important to determine the origin of hara-kiri death cases as well as all other medical cases. The medical history of the deceased and the information of relatives should be obtained before the autopsy.

**Keywords:** Suicide, Hara-kiri, Forensic Medicine, Abdominal Injury

**Öz:** İntihar ‘bireyin duygusal, ruhsal ya da sosyal nedenlerin etkisiyle kendi yaşamına son vermesi’ olarak tanımlanmaktadır. İntihar yöntemi seçiminde kültürel yapı, etnik grup, yaş, cinsiyet, ulaşılabilirlik gibi birçok faktör etkilidir. En sık intihar yöntemi ası olup, bunu ateşli silah, yüksekte atlama ve kimyevi madde alımı takip etmektedir. Kesici-delici alet ile intihar tüm intiharların % 2’sini oluştururken, neredeyse Harakiriye eş değer olan batına yönelik kesici-delici aletlerle meydana gelen intihar oranı % 0,2’dir. Olgumuzu değerli kılan, şahsın Türk ırkına mensup olması ve Japon ırkına özgü olan nadir rastlanan harakiriye benzer bir intihar yöntemi seçmiş olmasıdır. 56 yaşında psikotik bozukluk tanılı erkek olgu, batına nazik kesici-delici alet yaralanmalarına bağlı periton, ince bağırsak ve mezenter yaralanması sonucu kanama ve hipovolemik şok nedeniyle ölmüştür.

Olgumuz yaş ve cinsiyet itibarıyla literatürdeki benzer olgularla uyumluluk göstermektedir. Bunun yanında tıbbi geçmişinde ve yakınlarından alınan öyküde bilinen psikiyatrik tanısının bulunması ve yaşanmış intihar girişimlerinin varlığı anlamlı bulunmuştur.

Sonuç olarak harakiri yöntemiyle intihar çok sık karşılaştığımız bir olgu türü olmayıp, diğer tüm medikolegal ölüm olgularında olduğu gibi harakiri şeklindeki ölüm olgularının orijininin belirlenmesinde de, ayrıntılı otopsi işlemi ile beraber olay yerindeki bulgular, ölenin tıbbi özgeçmişi ve yakınlarından alınan bilgilerin bir arada değerlendirilmesi önemlidir.

**Anahtar Kelimeler:** İntihar, Harakiri, Adli Tıp, Batın Yaralanması

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## 1. Introduction

Suicide is defined as ‘the individual’s ending his/her own life under the influence of emotional, spiritual or social motives’ (1). Many factors such as cultural structure, ethnic group, age, gender, accessibility are effective in the selection of suicide method. Although the suicide method percentages used differ from each other in studies conducted until today, hanging is the most commonly used suicide method in the medical literature, it is followed by a firearm, high jump and chemical substance intake (2). When we look at the distribution of suicide methods; in one study, while hanging was ranked first with 232 (52.3%) cases, it was followed by the use of firearms with 126 cases (28.4%), chemical use with 40 cases (9%) (medicine and pesticide), high jump with 33 cases (7.4%) (3). In a study involving cases who committed suicide between 2002 and 2009, it was observed that 47% of the cases used hanging, 23.5% used firearms, 14.2% used chemical substances, 9% used jumping from the height method (4). While suicide with a cutting-piercing device constitutes 2% of all suicides, suicide rate with abdominal cutting-piercing tools, which is almost equivalent to Harakiri, is 0.2%. This low incidence trend remained unchanged from 1983 to 2016 in the literature reviewed (5).

The origins of deaths depending on cutting-piercing tool injuries are mostly accident and murder (6). Unless proven otherwise, it is difficult to say that the deaths caused by the cutting-piercing tool are suicide. Before accepting the deaths that occurred through this method as suicide, wounds must be carefully examined. Suicide wounds are usually found in the parts within the hand reach of the body (7). The presence of hesitation cuts is one of the findings supporting suicide (8).

Harakiri is a suicide method used mostly by the Japanese people. The word harakiri means “to slash the belly” (8). Historically, the first harakiri was practiced by a samurai who committed suicide after being caught by enemies. Harakiri is considered to die with pride; however, it was banned by the government in 1873 (9). Classical harakiri involves inserting a knife into the lower-left area of the abdominal wall and moving the knife horizontally to the right. The blade is then pulled strongly upward so that it cuts an L-shaped line on the abdominal wall. In addition to its being very painful, this method causes a slow death (8).

In this study, a detailed review of the literature is presented to help illuminate a case who was belonged to the Turkish race and used a rare harakiri-like method for suicide and similar cases.

## Ethical Declaration

Helsinki Declaration rules were followed to conduct this study.

## 2. Case

A 56-year-old male was evaluated by us medicolegally for the death incident occurred with a cutting-piercing tool injury from his abdomen. At the crime scene; it was observed that the corpse was found lying face down on the floor, and the upper body garments were lifted upwards, that there was a bed and quilt with heavy blood contamination on its right side, that there was a knife with blood contamination between the bed and the body, which was thought to be used for suicidal purposes. When the knife is examined; it was found that the total length of the blade part was 25 cm, the blade length was 13 cm, the blade width was 3 cm, the one side of the blade was sharp, the other was blunt and with a wooden handle. It was found that no additional examination in terms of blood and fingerprints on the knife was conducted since it was stated that it was not required by the Public Prosecutor’s Office during the judicial investigation process.

Based on the statements taken from the relatives, it has been declared that; he was living alone in the village house and diagnosed with psychosis, there was a 3-day hospitalization in Manisa Psychiatric and Neurological Diseases Hospital approximately 45 days before the incident in question, and conducted repeated suicide attempts approximately 6 months ago with the use of cutting-piercing tools and drugs and he does not have any knowledge and curiosity about Japanese culture.

In the autopsy procedure on the body; it was seen that there is 5 cm long incision wound with skin, subcutaneous and muscular tissue line that is thought to occur in at least 2 strokes on the left-hand wrist inner face, two 1 cm long skin and subcutaneous cutting line wound on the right-hand wrist inner face, numerous mature cutting wound scars on the left anterior surfaces of the chest and abdomen. In the left hemithorax, a 7 cm inferolateral of the nipple, a 1.5 cm long, skin subcutaneous tissue line cutting device wound. Also, in the left lower quadrant of the abdomen, 7 cm inferolateral to the umbilicus It was found that there was an 8 cm long and 4 cm wide cutting-piercing tool wound, which was thought to be advanced by turning it after penetration.

Small intestines and mesentery were protruded through this cutting-piercing tool wound. When the intestinal tissue protruding to the outside was examined, it was determined that there was a full cut incision in three different places at the level of ileum, and hematomas were present in the mesentery. In the abdomen, 600 cc of free blood

was observed apart from the hematoma of the presence of hematomas in addition to this 600 cc of bleeding and considering the presence of dried blood, which cannot be measured at the scene, absorbed by environmental factors. It was concluded that our case died of bleeding and hypovolemic shock depending on the peritoneum, small intestine and mesentery injury caused by injury to the abdomen.

In a toxicological analysis of blood, urine and intraocular fluid samples taken during an autopsy, it was determined that there were no substances in the blood and intraocular fluid samples and tramadol, and that one of the drug active substances analyzed in the urine. It was found that the body was not under the influence of any drunk or drug-stimulating substance at the time of death.

### 3. Discussion

Suicide with a cutting-piercing tool is a rare method of suicide. The origins of deaths by means of cutting-piercing tool injuries are mostly accident and murder (6).

When examined in terms of gender and age in studies, the numerical superiority of men aged 35-70 years was observed in self-injuries with cutting-piercing tools (10). In studies when the examination was conducted in terms of gender and age, the numerical superiority of men aged 35-70 years was observed in self-injuries with

cutting-piercing tools (10). In one study, individuals who chose harakiri were shown to be relatively older than those who chose other methods. Previous studies suggested that there was a relationship between the fatality of suicide attempts and the age of those who attempted suicide. It was found that older individuals use methods that are less likely to survive (11). The fact that our case is a 56-year-old man is compatible with the general literature.

Some morphological criteria have been defined in suicide cases caused by cutting-piercing tools. These were stated as: targeting easily reachable body points, mainly the heart spot, the clothes have been removed where the cutting-piercing tool is applied, the wounds were seen on the left side of the body for right-handers, wounds were limited as irregular and grouped in a small area, a rare puncture in the costa and sternum, absence of defensive wounds, less than 10 deep cutting-piercing instrument wounds. In our case, there are many cutting wounds with skin and subcutaneous tissue lines on the left side of the thorax wall. This suggests that the heart spot may have been targeted first and the sweater of the individual has been lifted upwards in order to facilitate access to the targeted area. Besides, there is no defense wound in our case. In the same study, 40% of 23 cases were shown to be localized in the right upper quadrant and 23% in the right lower quadrant (6). In another study, it was found that the injury was most common in the periumbilical region and was followed by the epigastric region (9). In our case, a wound to the abdomen, cutting-piercing instrument is on the left side.

In a study conducted in Japan, cutting tools used by men for suicide; razors (43%), knives (22%), cutting-piercing kitchen tools (16%), and those used by women



Picture 1. Knife used for suicide purposes

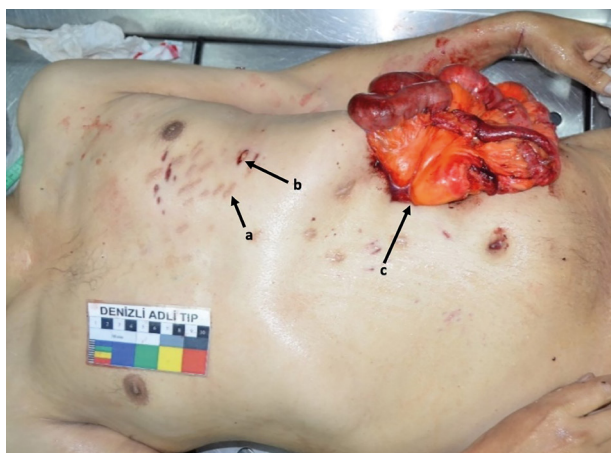


Picture 2. The position of the corpse when the crime scene was arrived.

were shaving knives (43%), 22% kitchen knives, 8% short swords, 8% scissors. In terms of usability, the most commonly used sharp tools are the tools that can be found easily, appropriately sized and appear sharp. In terms of profession, carpenters can mostly use a chisel, doctors and nurses can use surgical tools (12). Our case used a knife with a wooden handle with a total length of 25 cm, blade length of 13 cm, blade width of 3 cm, one end of the blade was sharp, the other end was blunt.

By Di Nunno et al. four cases who committed suicide by the method of Harakiri in 40 years have been examined. It has been revealed that it is important to make a differential diagnosis between suicide and murder in cases of death by harakiri and the presence of hesitation cuts helps in this distinction (8). In our case, there are shallow wounds of cutting tools, which can be described as hesitation cuts in the abdomen and wrists.

Kemal et al. examined the deaths depending on the cutting-piercing device injury, which applied to the Bexar Forensic Medicine Unit from January 1988 until May 2010. It was stated that a total of 418 deaths was originated from 349 murders, 54 suicides, 12 accidents, and the origin of 2 deaths could not be determined. While head, chest and back injuries are more common in murders, injuries in the abdomen and extremities have been proven to be more common in suicides. It has been determined that hesitation incisions were detected in 35% of suicides (13). Neck injuries were the most common in cases of both genders. It was detected that the ratio of abdominal injuries was higher in males than in females. In cases of suicide caused by cutting tools, it was found that wounds were not limited to one area, but also applied to the other areas of the body (12). In our case, there were cutting wounds caused the lethal injury in the abdomen, there



**Picture 3.** a) mature scar tissues caused by old suicide attempt b) newly occurred cut did not reach the thoracic cavity and other superficial cuts c) protruded bowel loops.

were also non-lethal hesitation incisions in the bilateral wrist and left chest anterior wall.

The suicide cases were examined by Byard et al. In which cutting tools were used from January 20, 1981, to December 2000 of Forensic Science Center in Adelaide, South Australia. It has been shown that in 1.6% (51 cases) of total suicides, a cutting-piercing device was used, in 54% (23 cases) of these cases, there were hesitation scars and in five cases there were wrist scars stemming from the previous suicide attempts. Injuries caused by cutting-piercing tools are most common in extremities in both genders, and male gender superiority has been identified in abdominal and thoracic injuries (14). In our case, there are old and new cutting-piercing tool wounds in the thorax, lethal cutting-piercing instrument wounds in the abdomen and non-lethal cutting instrument wounds in the bilateral wrist. These results are consistent with the literature in terms of suicide.

Suicide cases were examined occurred by the use of cutting-piercing tools between 1997-2007 in the North Branch of the National Institute of Law (Portugal) by Assunção et al. It was shown that depression symptoms were observed in five cases, a total of nine people had previously expressed some kind of suicidal ideation and eight attempted suicide. The most frequently used object was found to be the kitchen knife and the most common anatomical spot which was fatally injured was the neck area. In six cases, hesitations incisions have been shown in the immediate vicinity of the fatal wound (15). In a study conducted by Kato et al., 647 suicide attempts were examined, it was determined that 25 of these cases attempted suicide with harakiri, In this case group, the ratio



**Picture 4.** Hesitation cuts on the right wrist made with a sharp-piercing tool.

of males to females and the proportion of patients with mood disorders were found to be significantly higher compared to the other methods (16). In our case, scar tissues from the above-mentioned suicide attempts are seen in the left chest spot and in the upper right quadrant of the abdomen. In addition to that, it was found out that our patient had a psychotic disorder and that he was hospitalized in Manisa Mental and Neurological Diseases Hospital 45 days before his death.

Consequently, suicide by the harakiri method is not a type of case that we encounter frequently. As with all other medicolegal death cases, in determining the origin of death cases in the form of harakiri. It is extremely important to evaluate the findings of the incident, the medical history of the deceased and the information received from the relatives along with the detailed autopsy procedure. It is possible that every finding has the nature of evidence. Starting from the incident scene, careful attention at every stage of the process, the complete and accurate evaluation of the findings shed light on the judicial investigation process.



**Picture 5.** Cutting-piercing wound on the left wrist that did cause major vascular injury.

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