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## Original Research Article

## Importance of soft tissue injuries in the facial area in terms of criminal law and compensation for bodily damages

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## ABSTRACT

**Objective:** Skin injuries in the face area are one of the common causes of admission to the emergency department and the treatment to be applied affects whether or not there will be any scars. In the legal system, fixed facial scar is given great importance and it is an aggravating factor in criminal law. However, it is seen that the permanent scars formed on the face as a result of trauma do not have an exact equivalent in the disability determination charts. In our study; in the disability detection regulations, it was tried to determine the deficiencies related to permanent scars in the face area and it was aimed to raise awareness about this issue.

**Materials and Methods:** We analyzed 1972 cases that applied for disability assessment and were examined and reported by us. With the trauma in his body that is the subject of the report 302 cases with a causal trace were included in the study.

**Results:** It was observed that 212 (70%) of 302 cases with facial trauma-related scars received a rate from one of the disability determination charts. It was determined that 90 (30%) cases did not receive a rate.

**Discussion:** Conclusion: The emergency physician who first encounters the trauma patient should apply the treatment methods that can achieve the best aesthetic results in a patient who is admitted to the hospital due to facial injury and take all kinds of measures to reduce the possibility of remaining scars. We think that there should be a section that specifies exactly the rate to be given by classifying permanent scar wounds in the face area according to various features, by updating the scales used in disability determination procedures.

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## 1. Introduction

The face; has been an indispensable part of social communication in all times and societies, especially today, due to the change in aesthetic perceptions, social perspectives, and the undeniable effects of social media, the social position has become the most important element of issues such as finding a job and getting married. A permanent scar on the face due to trauma affects a person's

life negatively.<sup>1</sup> As a result, special attention is paid to facial injuries in legal and medical practices.

Injuries resulting from trauma can leave scars even if they complete the healing process, but not every scar on the face is considered a fixed scar.<sup>2</sup> According to the new Turkish Penal Code (TPC) numbered 5237; a fixed scar on the face is defined as a wound that occurs within the borders of the face, after healing, in daylight, or in a well-lit environment, which can be clearly noticed at first glance from a distance of verbal dialogue (1-2 meters) between people.<sup>3</sup> The healing process must be completed in order to

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accurately assess whether the scar resulting from the trauma is a permanent scar. In forensic medicine applications, at least six months after the injury, an examination is made to determine whether a permanent scar is formed on the face. This period can be extended for wounds that have not completed the healing process.<sup>4</sup>

A permanent scar on the face is an aggravated injury crime as a result of paragraph 1 of Article 87 under the title of crimes against bodily immunity in the TPC and a wound of this nature is considered to increase the punishment.<sup>5</sup> Scars, which cause changes in the natural appearance of the face, have been accepted as an aggravating factor due to the view that every person has the right to preserve the face shape.<sup>2</sup>

Skin injuries in the face area are one of the most common reasons for admission to the emergency department.<sup>6</sup> Facial injuries are seen in 10-15 % of patients who apply to the emergency department after blunt trauma.<sup>7</sup> When only maxillofacial injuries are evaluated, soft tissue trauma is the most common type of injury with 60-65%.<sup>8-10</sup> In the treatment of soft tissue injuries, it is aimed to restore the former function of the affected area and provide aesthetics with minimal scarring. For this reason, the treatment applied to facial skin injuries should be aimed at minimizing the scarring that will occur as a result of the healing period and reducing possible negative factors. Wound irrigation to reduce bacterial flora and remove foreign bodies is the first step in treatment that should not be skipped. Nerve blockage with the appropriate anesthetic agent and selection of the appropriate suture technique is also very important. In the suture technique to be chosen; low wound tension, providing harmonious wound edges after closure and minimal scarring at the transition points of the suture material are the points to be considered.<sup>11</sup> More sensitive areas such as eyebrows, lip edges, and eyelids can be closed using resorbable 3-0 or 4-0 sutures, and the skin can be closed using 5-0 or 6-0 sutures.<sup>12</sup> Necessary precautions should be taken against possible infection.

Scope of the financial compensation law of permanent scars on the face due to trauma; used in determining the disability rate and compensation for bodily harm. It is seen that there is no exact equivalent in the tables. In the Determination Procedures for the Determination of Working Power and Loss of Proficiency in Profession published in the official gazette on 11.10.2008, in the disability rate chart of the Disability Criterion, Classification and Health Board Reports to be given to the Disabled, published in the official gazette on 30.03.2013, and in the Disability Assessment Table for Adults published on 20.02.2019, there is no substance that fully covers the permanent scars in the face area.<sup>13-15</sup>

In this study, it was tried to determine the possible shortcomings of the current regulations regarding permanent scars in the face area, and as a result, it

aimed to raise awareness about this important issue.

## 2. Materials and Methods

Between 01.01.2019 and 01.09.2020, the reports of 1972 cases, which were examined by us for the determination of disability rate and compensation for bodily harm in Tokat Gaziosmanpasa University Faculty of Medicine, Department of Forensic Medicine were retrospectively analyzed. 302 cases with traces related to the trauma in the face of the victim, which was the subject of the report were examined was included in the study. Cases; age, gender, type of accident, date of the accident, date of examination, definition in centimeters if the injury is within the face boundaries and facial region localization were examined. As a result of the disability determination evaluation, it was determined how many points were obtained from which item of the scale, according to the date of the accident, of the cases with traces related to the related trauma in the facial region.

On 04.11.2021, approval numbered 21-KAEK-076 was received from the Tokat Gaziosmanpasa University Faculty of Medicine Dean's Clinical Research Ethics Committee, stating that there was no ethical or scientific objection to our study.

### 2.1. Statistical analysis

Descriptive analyzes were performed to give information about the general characteristics of the study groups. Data belonging to continuous variables are in the form of mean±standard deviation and median minimum and maximum values; data on categorical variables were given as n (%). Ready-made statistical software was used for calculations (SPSS 22.0 Chicago, IL, USA).

## 3. Results

In terms of disability determination, it was determined that 28% of the 302 cases with facial trauma-related scars in the report were female and 72% were male and the mean age was 32.2 (standard deviation ±14.31) (min:4, max:82). In the examination made according to the permanent permission area in the face area; forehead region in 131 (43.4%) cases, right eye circumference, right zygomatic region in 46 (15.2% ) cases, left eye circumference, left the zygomatic region in 38 (12.6% ) cases, right jaw and right malar region in 28 (9.3%) cases, It was determined that there were permanent scars in the left jaw and left malar region in 20 (6.7%) cases, in the neck region including the facial borders in 9 (3%) cases and around the nose and mouth in 34 (11.3%) cases.

It was observed that 212 (70%) of 302 cases with traces related to trauma in the facial region, which is the subject of the report, received a rate from one of the scales used in the determination of the disability rate and compensation

for bodily harm. It was determined that 90 (30%) cases did not receive a rate from one of the scales. It was seen that 30 (10%) cases got a ratio from the Disability Criteria Table of Skin heading section and the average of the given ratio was 5. 95 (31%) cases got a rate from the Leather cap section of the appendix of the Regulation on Disability Assessment for Adults and the average given rate was 5. While 87 (29%) cases were rated from the A chart in the Annex of the Regulation on Determination of the Rate of Working Power and Loss of Profitability, it was determined that the average rate was 3.6, the lowest rate was 3 and the highest rate was 9.1. It was determined that the smallest 3x0.5 cm scar ratio was given in cases with a permanent scar ratio in the facial region. It was observed that there was a single lesion on the face in 144 cases and multiple lesions in 158 cases. It was determined that 65% of the cases that received a rate were injured as a result of in-vehicle traffic accidents, 22% from a non-vehicle traffic accident, and 10% as a result of the motorcycle accident

#### 4. Discussion

The face; located in the front of the head, contains critical elements for verbal and nonverbal communication such as the mouth, eyes, and facial muscles. When communicating with people, the face comes to the fore first. Facial violations have historically been considered degrading and aggravating the crime. The Italian Zanardelli Law, which was taken as a basis while preparing the TPC, has secured the facial area by giving importance to the presence of fixed scars in the facial area.<sup>16</sup> The reason for this is that in Italy during the period, it is to leave marks on the face of women with a razor due to revenge or jealousy. Permanent scars (Sfregio Permanente del Viso) that disrupt the aesthetics of the face area are included in the TPC as a permanent scar on the face.<sup>16,17</sup>

In a study by Kafadar et al. in which they evaluated cases with fixed facial scars, the mean age was reported as 32, similar to our study.<sup>18</sup> Considering that the most active period of people in social and business life is between the ages of 20-50, it is expected that frequent injuries will occur during this period. In our study, 70% of the cases with facial scars were evaluated as permanent scars on the face. Kumral et al. while the fixed facial scars positivity rate was 62% in a study they conducted, this rate was reported as 34% in Kafadar's study.<sup>3,18</sup> Evaluating whether the facial scars are fixed scars on the face is one of the challenging issues for forensic medicine specialists. Although the examination is standardized, this situation is affected by many variables such as the age of the victim, the condition of the original wound, the surgical suture technique, the wound healing processes of the individuals, and the color of the facial skin can also vary with the point of view of the fixed scar on the face of the evaluating physician.<sup>19</sup> Kumral et al. for wound localization; evaluated the face as midline, nose, face

lateral, around the eyes, ear, and neck as separate regions. It was determined that the cases were mostly evaluated as fixed scars on the face due to injuries in the midline of the face.<sup>3</sup> In our study, wound localization were grouped as the forehead, right eye area, and right zygomatic area, left eye area and left the zygomatic area, nose and mouth area, right chin area and right malar area, left chin area, and left the malar area, neck. It was observed that the most common facial scars due to forehead injuries were evaluated. In Özdemir's study, similar to our study, it was seen that forehead injuries were most frequently evaluated as fixed scars.<sup>1</sup>

Fixed facial scars in Articles 87, 89, and 95 of TPC No. 5237; it has been considered as an aggravated reason by increasing the penalty by onefold for deliberate injury and by half for negligent injury and torture.<sup>5</sup> In addition, permanent scars in the face area are also the subject of pecuniary and non-pecuniary compensation files and there is various Supreme Court jurisprudence on the subject. Fixed facial scars have an important place in the law of compensation as well as being considered an aggravated reason in criminal law. With the decision of the 17th Civil Chamber of the Court of Cassation, it was stated that " The damage caused by the damage to the economic future due to the permanent scar on the face of the person should also be determined ".<sup>20</sup>

Fixed facial scars have a very important place in criminal law and their presence increases the penalty to be received by the other party. Due to any injury (intentional injury, traffic, work accidents, etc.), there is a serious break in the life of the victim, who has a permanent scar on the face, in terms of social withdrawal and finding a job. In this case, the punishment to be taken by the other party will not prevent the social and psychological destruction that he will experience and the shaking of his economic future, although it will cause the victim to partially relieve the pain and suffering. As stated in Article 54 of the Turkish Code of Obligations, besides the treatment expenses, loss of earnings, loss of working power, or loss of work capacity, the losses arising from the deterioration of his economic future should also be evaluated. In the jurisprudence of the 17th Civil Chamber of the Court of Cassation with the base number 2019/2579 and the decision number 2020/755; ' Damages resulting from the deterioration of the economic future of the person whose bodily integrity is violated BK m. In 46/I, it is expressed as "losses resulting from the deprivation of the economy". As it can be understood from this provision, the economic future of the person whose bodily integrity is violated may be shaken due to this violation. Such damages are the damages caused by the shaking of the economic future, except for the damages caused by the complete or partial loss of working power. The damages that occur due to the shaking of the economic future are future damages and these damages occur even if

there is no reduction in working power. The person whose bodily integrity is violated has difficulty in finding a new job in the labor market or maintaining his old job, even if there is no decrease in his working power or even if he works in the same job, he has to exert more effort than before the violation. In fact, these people can be dismissed from their jobs completely as a result of the violation.' Although it is explained as the form of facial beauty, we think that permanent scars in the form of permanent marks on the face, which occur especially in the members of the occupational group where the concept of face and facial beauty come to the fore will not only affect the economic future but will also reduce the working power by preventing promotion in business life and working with the same qualifications in the profession.<sup>21,22</sup> For example; a prominent scar on the face of a film artist or an individual working in the public relations department will make it difficult for him to find a job and cause economic loss. In the decisions of the Court of Cassation, which was examined, it was observed that although the courts decided on non-pecuniary damages in cases of permanent scars in the face area, these court decisions were overturned because generally a 'small amount' was decided.<sup>23</sup>

Forensic medicine physicians are requested by the courts and private law offices for compensation law to determine the trauma-related disability rates of the victims and the temporary and permanent disability rates of the individuals are determined by using the regulations in force at the time of the trauma. While the rate determined for the item "Keloid and hypertrophic scars that cover 10% of the body surface and cannot be removed by plastic surgery" is 7 on the A scale, it increases to 17 on the D scale and the rate of loss of earning power in the profession according to age is determined. Keloid and hypertrophic scars must cover at least 10% of the body area in order to be able to give a percentage of permanent scars in the Occupational Loss of Proficiency Regulation. Disability Criterion and Regulation on Disability Assessment for Adults In the section Skin Tumors-Benign Neoplasm and Hyperplasia under the skin title, a 5% rate is given in cases that cover 1-9% of the body surface in hypertrophic scar and keloid substances. This rate increases according to the increased intervals of the body surface ratio. Between 50-100% of the body area takes 40% in case of hypertrophic scars and keloids. In these tables, there is also a 15% item specifically for scarring covering the scalp and half of the face.<sup>13-15</sup> Body surface area is a measure used in chemotherapy treatment and burns treatment. In disability scales, the rates of hypertrophic scar and keloid are determined over the body surface area. There are formulas used to calculate body surface area. These formulas were developed by scientists such as Mosteller, Boyd, and Du Bois. In our study, we used the most frequently used Du Bois formula to calculate body surface area.<sup>24,25</sup> According to the Du Bois formula, the

body area of a person with an average height of 170 cm and a weight of 70 kg is 1.81 square meters (18100 square centimeters). In this case, 1% of body area corresponds to 181 square centimeters, and a scar of at least 18x10 cm is required for the Disability Criterion and Adult Disability Assessment Regulation, while 1810 square centimeters of scar is required to receive financial compensation from the scar for the Loss of Profitability Regulation texture is required. Considering that the total surface area of the head area is 9% of the whole body according to the law of the nines, the total surface area of the face area will correspond to a maximum of 4% of the whole body.<sup>26</sup> If we start from here, even if there is a permanent mark on the entire scalp along with the face, the victim will not be able to get a rate from this scale for the scale of loss of earning power in the profession. For the other two rulers, if there is a permanent scar on at least one-fourth of the face, the rate can be taken. This situation will lead to serious psychological and social problems for the victim as well as disrupting the aesthetics to a high degree and the victims will avoid many issues such as finding a job and going out on the street. As the rate of hypertrophic scar covering 1% of the body in the face area is determined, permanent scars in the face area, which have the characteristics of a fixed but smaller size, should also be equivalent in the financial compensation schedules.

## 5. Conclusion

The fixed scar on the face; is a concept that can significantly affect a person's social, economic, professional, family, and all kinds of personal life. At the same time, great importance was attached to the fixed scar on the face in criminal law. Considering all these, the physician should apply the treatment methods that can achieve the best aesthetic results in a patient who is admitted to the hospital due to facial injury and take all kinds of measures to reduce the possibility of remaining scars.

Within the scope of compensation law, we think that it would be more appropriate to update the disability rate determination and include an item that specifies the rate to be given by classifying permanent scars (localization of the wound in the facial area, size ranges, pigmentation level, etc.) in the facial area according to various characteristics in the compensation charts for bodily harms.

Our study was present as an oral presentation at the 1st international 17th national forensic sciences congress (12-15 November 2020, Online).

## 6. Conflict of Interest

The authors declare that there is no conflict of interest.

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None.

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