

Psychiatric Disorders, Delirium and Mortality in Patients Referred for Consultation in a Burn Center: A Four-Year Retrospective Study

Yanık Merkezinde Konsültasyon İstene Hastalardaki Psikiyatrik Bozukluklar, Deliryum ve Mortalite: Dört Yıllık Bir Retrospektif Çalışma

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ABSTRACT

Objective: The aim of this study was to examine psychiatric disorders after burn trauma and burn-related features in adults. **Method:** The records of the cases who were hospitalized in the burn center between January 2015 and January 2019 and for whom psychiatric consultation was requested were retrospectively reviewed. Sociodemographic characteristics, burn-related features, psychiatric diagnoses, and treatments of the patients were examined.

Results: The mean rate of psychiatric consultations requested in a burn center within a four-year period was 34.05% and 49 (28.5%) of these consulted cases had a work-related accident. Mean hospitalization time was 37.2±24 days and the most common burn type was a fire/flame injury. In the majority of the study sample (63.4%) the total body surface area burnt was more than 20%. Nineteen (11%) cases had a history of psychiatric disorder. The most common psychiatric diagnosis before burn injury was alcohol-drug addiction (n=14, 73.7%). The most common diagnosis after psychiatric consultation was adjustment disorder (31.9%). Among psychotropic drugs the initial treatment was started most frequently treatment with benzodiazepines (30.8%) and antipsychotics (58.1%). In 33 deceased cases, the most common psychiatric diagnosis was delirium with a rate of 42.4%.

Conclusion: The incidence of psychiatric disorders before and after burn injury was found to be high in the individuals. Conditions with a high risk of morbidity and mortality, such as delirium, should be diagnosed and treated priorly. Due to the early and long-term effects of burn trauma, a multidisciplinary approach should be developed and psychiatrists should be included in the management of treatment.

Keywords: burn, psychiatric disorder, delirium, mortality

ÖZ

Amaç: Erişkinlerde yanık travması sonrasında ortaya çıkan psikiyatrik bozuklukların ve yanıkla ilişkili özelliklerin incelenmesi amaçlanmıştır.

Yöntem: Ocak 2015-Ocak 2019 yılları arasında yanık merkezinde yatarak tedavi gören ve psikiyatri konsültasyonu istenen olguların kayıtları geriye dönük olarak taranmıştır. Olguların sosyodemografik özellikleri, yanıkla ilişkili özellikleri, psikiyatrik tanıları ve tedavileri incelenmiştir.

Bulgular: Yanık merkezinde 4 yıllık süre içinde psikiyatri konsültasyonu istenme oranı %34.05'ti, danışılan olguların 49'u (%28.5) iş kazası geçirmişti. Ortalama yatış süreleri 37.2±24 gün olup, en sık yanık şekli yangın/alev yaralanmasıydı. Örneklem büyük çoğunluğunda (%63.4) toplam vücut yüzey alanı %20'den fazlaydı. 19 (%11) olgunun geçmişte psikiyatrik hastalığı mevcuttu. Yanık öncesi en sık görülen psikiyatrik tanı alkol-madde bağımlılığıydı. (n=14, %73.7). Psikiyatrik konsültasyon sonucu en yüksek konulan tanı ise uyum bozukluğuydu (%31.9). Psikotrop ilaçlar içinde benzodiyazepin (%30.8) ve anti-psikotik (%58.1) başlanma oranı yüksekti. Vefat eden 33 olguda en sık görülen psikiyatrik tanı %42.4 oranıyla deliryumdü.

Sonuç: Yanık geçiren bireylerde yanık öncesinde ve sonrasında psikiyatrik hastalıkların görülme oranı yüksektir. Özellikle deliryum gibi morbidite ve mortalite riski olan durumlar öncelikle tedavi edilmelidir. Yanık travmasının erken ve uzun dönemdeki ruhsal etkileri nedeniyle multidisipliner yaklaşım sağlanarak tedavi yönetimine psikiyatristlerin dahil edilmesi önemlidir.

Anahtar kelimeler: yanık, psikiyatrik bozukluk, deliryum, mortalite

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INTRODUCTION

Severe physical injuries and burns constitute approximately 12% of the diseases in the world ⁽¹⁾. Whatever the reasons are, injuries are a major burden on the healthcare system which is responsible for the care and support of victims. Researchers believe that 98% of these cases are preventable. Although the age-adjusted injury mortality rate has been reduced by 21% between 1980 and 1997, the intentional and unintentional injuries are still the leading cause of death for children, adolescents and young adults ⁽¹⁾. Physical and psychological rehabilitation of these patients have become more important as a result of the increase in survival rates due to the developments in medicine ⁽²⁾.

From an etiological point of view, psychiatric disorders and burns are interrelated. After a severe trauma, such as burn injury, especially burns which cause distinct physical distortion of the face, can lead to psychiatric diseases, and mental illnesses eventually to a predisposition to burn injuries ^(1,3). From a psychiatric point of view, people with substance use disorders are at higher risk of injury, including burns ⁽⁴⁾. Similarly, suicidal patients with a mental disorder may also deliberately burn themselves ^(5,6). The prevalence of depression is higher among individuals who are traumatically injured and have a medical illness compared to the general population ^(7,8). The presence of a pre-existing psychiatric disorder in burn patients is associated with worse outcomes in the treatment of burns and is an important predictor of morbidity. In addition, the development of psychiatric disorder after burn injury is reported to be a factor negatively affecting the quality of life ⁽⁹⁻¹¹⁾. In the burn injury process and during the treatment, mental illnesses can be seen in patients due to severe pain, prolongation of treatment process, being confined to bed, and changes in body image ⁽¹²⁾. In this respect, it is important that patients are also evaluated from a psychiatric point of view after the initial emergency intervention in the burn unit, and psychiatrists should be included in the burn treatment team ⁽¹³⁾.

Delirium is one of the most common diagnoses in patients referred to psychiatric services from different wards ⁽¹⁴⁾. Prevalence of delirium among inpati-

ents is found to range from 10 to 30% ⁽¹⁵⁾. Delirium is characterized by an acute decline in the level of consciousness and cognition with particular impairment in attention. Other associated features include abnormal psychomotor activity, sleep cycle impairment and psychiatric symptoms such as abnormalities of mood, perception and behaviour. It develops over a short period of time and fluctuates during the course of the day ⁽¹⁶⁾. Studies on this field frequently state that delirium has significant effects on medical morbidity, hospitalization time, and postdischarge course ^(17,18). Delirium is therefore a clinical diagnosis that requires emergent medical care and treatment in burn patients and it may be fatal if not treated ⁽¹⁹⁾.

Studies conducted in Turkey examining burns and mental disorders were reviewed, and a study analyzing family characteristics of children and adolescents with corrosive burns and another study evaluating burn related psychiatric disorders in children were identified ^(20,21). There was only one study examining psychiatric disorders in the early period in an adult population ⁽²²⁾. Therefore, our study will contribute to the literature in this field. The aim of this study is to examine the distribution of psychiatric diagnoses, clinical characteristics and treatments in psychiatric consultations requested by the burn center.

MATERIAL and METHODS

The burn center in our hospital consists of 12 beds -eight for service and four for intensive care-, an operating room, two dressing rooms, hydrotherapy halls, one hyperbaric oxygen therapy device and one polyclinic. It is a tertiary treatment center providing healthcare to an important population in the Aegean region, which accepts moderate and severe burn patients and patients with additional trauma or comorbidities over 18 years of age. This center provides healthcare services to 250 inpatients per year on average. A total of 172 cases that were hospitalized in the burn center between January 2015 and January 2019 and for whom psychiatric consultation was requested were retrospectively evaluated. According to the good clinical practice guidelines written approval was obtained from the hospital committee in order to examine the medical records of

the cases retrospectively. Data such as age, gender, education, marital status, occupation, cause, and location of the burnt area on body, whether it is a work-related accident, percentage of total body surface area (TBSA%) burnt, psychiatric history and diagnosis, alcohol-substance abuse, number of consultations requested from psychiatry, the time between hospitalization and request for psychiatric consultation length of hospital stay, and the psychotropic drugs used were examined.

Statistical Analysis: SPSS 22 statistical package program was used in all analyses. In addition to descriptive statistics (median and percentage distributions), Mann Whitney-U test was used and categorical variables were compared using chi-square test. $P < 0.05$ was considered statistically significant.

RESULTS

In 505 cases hospitalized in the burn center during the four-year period, psychiatric consultations were requested for 172 (34.05%) cases. Of these cases, 39 (22.7%) were female and 133 (77.3%) were male. The median age of the patients was 37 (25-52) years and the majority were married ($n=94$, 54.7%). The median duration of education was 5 (5-11) years, and 91 patients (52.9%) were unemployed. Forty-nine (28.5%) patients had an occupational accident, and the majority of these cases were male workers ($p=0.014$). Overall and gender-based sociodemographic characteristics of the cases are given in Table 1.

The median length of hospitalization in the intensive care unit was 6.5 (4-11) days and total length of hospitalization was 15.5 (3-40) days. The most common burn pattern was fire-flame injury ($n=120$, 69.8%). The most common areas of burn injury were the areas apart from the head and neck, hands and the genital region ($n=87$, 50.6%). Nineteen (11%) patients had a history of psychiatric disorder, including alcohol-drug addicts ($n=14$: 73.7%), those with bipolar mood disorder ($n=2$: 10.5%), psychotic disorder ($n=1$), delirium ($n=1$), and adjustment disorder ($n=1$: 5.3%). In the whole sample, 10 (5.8%) cases were hospitalized due to self-inflicted burns. Of the 10 patients who burned themselves, 2 had dependence, 1 had bipolar mood disorder, and 1 had psychotic disorder before burn trauma. Psychiatric consultation was requested for 94 patients (54.6%), during the first week of hospitalization and the most common psychiatric diagnosis after evaluation of all cases was adjustment disorder ($n=54$, 31.4%). As a result of the consultation, antidepressants were used in 78 (45.3%), benzodiazepines in 53 (30.81%), antipsychotics in 100 (58.1%), and multiple psychotropic agents in 49 (28.5%) cases. The details of the psychiatric consultation requested for burn patients are given in Table 2 and the distribution of psychiatric diagnoses received by the patients is given in Table 3.

Thirty-three (19.2%) patients died due to cardiac arrest, sepsis, multiple organ failure and adult respiratory distress syndrome during burn treatment. The most common psychiatric diagnosis among these

Table 1. Sociodemographic characteristics of cases who were evaluated by the psychiatrist.

Clinical variables	Men (n=133)	Women (n=39)	Total (n=172)	Z / χ^2	P
Age (median) (25-75%)	36 (25-48)	41 (30-66)	37 (25.25-52.75)	-1.681 -1.075	0.93 0.283
Education (median) (25-75%)	5 (5-11)	5 (0-11)	5 (5-11)	17.376	0.000*
Marital status (n, %)				9.316	0.002*
Single	58 (43.6%)	11 (28.2%)	69 (40.1%)		
Married	73 (54.9%)	21 (53.8%)	94 (54.7%)		
Widowed/Separate	2 (1.5%)	7 (17.9%)	9 (5.2%)		
Job (n, %)				6.07	0.014*
Unemployed	62 (46.6%)	29 (74.4%)	91 (52.9%)		
Employed	71 (53.4%)	10 (25.6%)	81 (47.1%)		
Work-related accident	44 (33.1%)	5 (12.8%)	49 (28.5%)		

* $p < 0.05$ was considered as statistically significant

Table 2. Clinical characteristics of the patients who were evaluated by the psychiatrist.

Clinical variables	Men (n=133)	Women (n=39)	Total (n=172)	Z / χ^2	P
Duration of intensive care stay (median) (25-75%)	6 (4-11)	7 (2-11)	6.5 (4-11)	-0.227 -0.634	0.634 0.526
Duration of total hospitalization (median) (25-75%)	17 (3-41)	14 (1-39)	15.5 (3-40)	15.31	0.000*
Type of burn (n, %)					
Fire/flame	90 (67.7%)	30 (76.9%)	120 (69.8%)	4.257	0.235
Scald	8 (6%)	8 (20.5%)	16 (9.3%)		
Other (chemical-electrical)	33 (24.8%)	1 (2.6%)	36 (20.9%)		
Site of injury (n,%)					
Head	32 (30.9%)	8 (20.5%)	40 (23.3%)	2.646	0.084
Hand	21 (15.8%)	4 (10.3%)	25 (14.5%)		
Genital area	12 (9%)	8 (20.5%)	20 (11.6%)		
Other	68 (51.1%)	19 (48.7%)	87 (50.6%)		
Mortality (n, %)	22 (16.5%)	11 (28.2%)	33 (19.2%)		
TBSA (n, %)					
0-10	12 (9%)	1 (2.6%)	13 (7.6%)	2.5	0.287
10-20	36 (38.7%)	14 (35.9%)	50 (29.1%)		
>20	85 (63.9%)	24 (61.5%)	109 (63.4%)		

TBSA: Total body surface area, * $p < 0.05$ was considered as statistically significant

Table 3. Distribution of psychiatric diagnoses in patients who were evaluated by the psychiatrist.

Psychiatric diagnosis (n,%)	Men (n=133)	Women (n=39)	Total (n=172)	χ^2	P
Adjustment disorder	44 (33.1%)	10 (25.6%)	54 (31.4%)		
Anxiety disorders	25 (18.8%)	8 (20.5%)	33 (19.2%)		
Depression	18 (13.5%)	11 (28.2%)	29 (16.9%)	7.105	0.130
Delirium	20 (15%)	7 (17.9%)	27 (15.7%)		
Other Diagnosis	26 (19.6%)	3 (7.7%)	29 (16.9%)		
Substance use disorder	16 (12%)	-	16 (9.3%)		
Acute stress disorder	8 (6%)	2 (5.1%)	10 (5.8%)		
Bipolar disorder	1 (0.8%)	1 (2.6%)	2 (1.2%)		
Psychotic disorder	1 (0.8%)	-	1 (0.6%)		

$p < 0.05$ was considered as statistically significant

Table 4. Distribution of psychiatric diagnoses in patients who died in burn center.

Psychiatric diagnosis (n,%)	Men (n=22)	Women (n=11)	Total (n=33)
Adjustment disorder	5 (22.7%)	3 (27.3%)	8 (24.2%)
Anxiety disorders	3 (13.6%)	-	3 (9.1%)
Depression	-	2 (18.2%)	2 (6.1%)
Delirium	10 (45.5%)	4 (36.4%)	14 (42.4%)
Other Diagnosis	4 (18.2%)	2 (18.2%)	6 (18.2%)
Substance use disorder	4 (8.21%)	-	4 (12.1%)
Acute stress disorders	-	1 (9.1%)	1 (3%)
Bipolar disorders	-	1 (9.1%)	1 (3%)
Psychotic disorders	-	-	-

$p < 0.05$ was considered as statistically significant

cases was delirium (n=14, 42.4%). Distribution of psychiatric diagnoses in these 33 cases according to gender is given in Table 4.

DISCUSSION

Burn trauma results in outcomes with negative psychological, social and physical effects in the exposed individuals in the short-, and long- term. In the present study, retrospective evaluation of the four-year period revealed that psychiatric consultation was requested in 34% of the patients who were hospitalized at the burn center. When a study was

evaluated in the literature, it was observed that the rate of psychiatric consultation after burn injury was reported as 19.6%⁽²³⁾. Gender and age are important risk factors for severe burn injuries associated with adverse developmental and behavioral patterns⁽²⁴⁾. In our study, the mean age of burn patients was 40.51 years and majority of the patients were male (F/M ratio=1/3). These results are consistent with the results of other studies in the literature⁽²⁵⁻²⁷⁾. Similarly, employment status and rate of work-related accidents were found to be significantly higher in men, consistent with other studies⁽²⁵⁻²⁸⁾. This result may be attributed to a higher proportion of males working in high risk sectors in Turkey, as is the case in rapidly industrializing countries.

In the present study, the majority of cases requiring psychiatric consultation were hospitalized in the intensive care unit. Mean length of hospitalization in the burn center was 37.2±24.3 days. When the literature is reviewed, it can be seen that the mean length of hospitalization varies between centers. Ter Smitten et al. (2011) reported mean length of hospitalization as 27±30 days⁽²⁷⁾, whereas Logsetty et al. (2016) as 15.1±21.8 days⁽⁹⁾. The length of hospitalization in burn centers can be affected by various parameters such as severity of burn, presence of intensive care unit, additional medical diseases, complications, and premorbid psychiatric diagnosis⁽²⁹⁾. In the present study, the most common cause of burn was fire/flame with a ratio of 76.9%. Second most common cause was scalding in women and other (electric/chemical) burns in men, and there was a statistically significant difference between the genders. Similar to our study, there was a difference between the genders in the literature^(26,28,30). When three studies conducted in Turkey were examined, it was seen that scalding burns (60.7%, 69%, 47.7%) were reported as the most common causes of burns⁽³¹⁻³³⁾. However, there is no gender comparison in these studies, and we believe that the absence of a burn intensive care unit in those centers and the referral of severe/complicated cases to other hospitals may have affected the causes of burns. In an other retrospective study, Yücel and Kilavuz reported that among moderately severe burns the scalding burns (52.6%) and among severe burns flame burns (54.4%) were the most common causes of burn injuries⁽³⁰⁾.

When location of burn was examined in our study, it was observed that the body regions other than the head, hands and the genital region were affected the most. The severity of the burn is an important risk factor in the development of psychiatric disorder. In one study, at least one mental disorder was found to develop in one third of minor burns (TBSA<5%), two thirds of moderate burns (TBSA = 5-20%), and almost all of severe burns (TBSA>20%)⁽²³⁾. In our study, the majority of the cases requiring psychiatric consultation (n=109, 63.4%) had a TBSA of over 20%. This finding is consistent with the results of another study examining 10 years of data in Turkey⁽²⁸⁾. In the literature, Özçetin et al. (2012) reported that TBSA was 6-10% in the majority of cases⁽³²⁾, and Sıkar et al. (2018) reported that TBSA was 6-15%⁽³¹⁾. In the presence of severe burns, as encountered in the intensive care units, psychiatric support is especially important for patients who develop complications⁽²⁶⁾. The higher rate of hospitalization in the intensive care unit in our study supports the need for psychiatric evaluation. Another important issue is that the mean length of hospitalization and the duration of transition to independent life are higher in patients with pre-burn psychiatric disorders compared to others⁽³⁴⁾. In individuals, the presence of mental illness before burn may sometimes be the cause of the burn itself (self-harm), and reasons such as the low treatment motivation caused by depression, the lack of proper wound care due to the difficulty in assessing reality can make the treatment and healing process difficult^(35,36). In some studies, it has been reported that a significant number of patients admitted to burn centers have pre-burn Axis I and Axis II psychiatric disorders, and some personality traits such as impulsivity predisposes to burn injury^(26,37). It was also found that this patient group stayed longer in the hospital and required greater number of surgical procedures, thus creating difficulties for various disciplines in the treatment and rehabilitation process⁽³⁵⁾. In our study, 19 patients (11%) had a psychiatric diagnosis before burn incident. When the distribution of the diagnoses in this group was examined, it was found that 74% of them had alcohol-drug dependence and 11% of them bipolar mood disorder. Palmu et al. (2010) evaluated 107 acute burn patients and reported the rate of previous psychiatric treatment as 29%⁽²⁶⁾. Logsetty et al. (2016) found that the rate of any psychiatric disorder in burn vic-

tims in the last 2 years before burn injury was 25.5%⁽⁹⁾. In our study, it was determined that 10 (5.8%) cases experienced burn trauma due to self-harm/suicide. In this group, two cases had alcohol and drug dependence, one case had bipolar mood disorder, and the other one had psychotic disorder. In our study, it is noteworthy that most of the individuals who suffered burns due to self-harm did not receive psychiatric support before the burn. Therefore, it can be thought that this group demonstrates impulsive decision and behavioral characteristics.

Burn team requested psychiatric consultations within the first week in 54.6% of the patients and the most frequent diagnosis based on psychiatric evaluation was adjustment disorder (31.4%). In a similar study, the rate of adjustment disorder was found to be 61.5%⁽³⁸⁾. Adjustment disorder is among the most common psychiatric diagnoses in patients hospitalized for medical and surgical reasons, and its prevalence in patients receiving palliative care in hematology and oncology clinics was reported to be 15.4% and 19.4% respectively^(39,40). In the case of emotional and behavioral symptoms that do not meet the criteria of acute stress disorder after acute trauma, psychiatrists may turn to the diagnosis of adjustment disorder^(41,42). This may have also increased the rate of this diagnosis in our sample. When the distribution of other psychiatric diagnoses was examined in our study, anxiety disorder was found in 19.2%, major depression in 16.9% and delirium in 15.7% of the cases. In a study investigating the distribution of psychiatric diagnoses in inpatients in the overall hospital sample in Turkey, the prevalence of depressive disorders, delirium, schizophrenia-psychosis, anxiety disorder, trauma and related disorders, and alcohol-substance use disorder were reported to be 19.5%, 18.2%, 7.4%, 6.1%, 5.6%, and 4.3%, respectively⁽⁴³⁾. The prevalence of mental disorders in the overall hospital sample is affected by variables such as the duration of the additional medical disease(s), the nature of the trauma, characteristics of previous psychiatric disorder, the knowledge of the treatment team about the psychiatric disorder, the presence of psychosocial support systems and the loss of functioning in the individual^(24,42,44). Palmu et al. (2010) reported substance-related disorders (46.7%) as the most common lifetime disorder among burn patients⁽²⁶⁾. This ratio is quite high compared to our

results. This may be due to the fact that the prevalence of substance abuse in Turkey is lower compared to other developed countries⁽⁴⁵⁾. In the same study, the diagnosis of lifetime psychotic disorder was 10.3% which was above the community average. One in four people had mood disorder throughout their life, and 5.6% of them had depression during the month before the burn. Similar to our results, anxiety disorder was defined in 14% and acute stress disorder in 5.8% of their patients⁽²⁶⁾. Yabanoğlu et al. (2012) reviewed the files of 1369 cases, and reported that the rate of psychiatric diagnosis within 15 days after the burn incident was 3.2%, and the diagnoses were PTSD in 26.6%, delirium in 24.4%, anxiety disorder in 17.7%, depression in 15.5% of the patients, respectively⁽²²⁾. In our study, we observed that 33 patients (19%) died during the four-year period and the majority of this group was diagnosed as delirium (n=14, 42.4%). In another study with large sample of cases in which burn patients were examined in general, the mortality rate was found to be 7.4%⁽³⁰⁾. Delirium can be seen in one fifth of burn patients⁽³⁶⁾. Previous studies have reported that delirium is a predictor of mortality in risky groups^(46,47). Delirium may lead to increased mortality and morbidity as new risk factors are added to the underlying etiology due to inadequate diagnosis of the delirium and the application of inappropriate treatments⁽⁴⁸⁾. Therefore, early diagnosis and management of the treatment of delirium are important issues.

In a study examining psychiatric consultations requested at a university hospital, it was found that 35.2% of the patients were treated with antidepressants followed by antipsychotics (22.6%), benzodiazepines (9%) and 32% of them were followed-up without drug treatment⁽⁴⁹⁾. On the other hand, Göktaş et al. (2006) recommended antidepressants to 65.4% of the patients consulted, antipsychotic to 9.8%, and benzodiazepine to 3.7%; and 19.4% of the patients were recommended with unmedicated follow-up⁽⁵⁰⁾. Similarly, Koroğlu et al. (2011) initiated antidepressants in 65.4%, antipsychotics in 10.8%, and benzodiazepines in 6.7% of their patients⁽⁵¹⁾. When the distribution of psychotropic drugs initiated in our study as a result of psychiatry consultation was examined, it was found that antidepressants were used in 45.3%, benzodiazepines in 30.8%, and antipsychotics in 58.1% of the patients. The rate of

multiple psychotropic drug use was 28.5%. In our study, the use of benzodiazepines and antipsychotics was higher compared to studies investigating clinics other than burn centers, which can be attributed to reasons such as severe anxiety, fear of death, disturbance in the sleep-wake cycle, and delirium risk in burn patients as reported in the literature ⁽⁵²⁾.

Studies have reported that individuals suffering from burn injuries use more health care in general before and after the incident, which increases the burden of care in health services ⁽⁹⁾. Burn victims constitute a sensitive group for healthcare personnel due to increased risk of psychopathology and ongoing care needs. Therefore, it is important to examine the parameters for maintaining mental health in this population and to plan multidisciplinary approaches in the early and late stages of treatment.

The present study has some limitations. These include the nonuse of structured psychiatric interview scales and the retrospective methodology. When current literature is reviewed, this study is important because of the limited number of studies investigating burn data with respect to psychiatric consultations in Turkey. As a result of this study, another prospective study was planned in which the individuals hospitalized in the burn center of our hospital will be examined.

CONCLUSION

Mental disorders are more common in burn victims before and after the incident compared to the general population. Screening the symptoms of mental disorders and psychotherapeutic and pharmacological interventions in syndromic cases after acute care in hospital conditions will lead to better management of burn treatment and rehabilitation as well as psychiatric disorders. Especially syndromes with a high risk of mortality, such as delirium, should be treated promptly because of the adverse effects on the course of treatment and clinical picture and since most of these syndromes are most likely reversible. Therefore, delirium should be recognized in hospitalized burn patients, and co-operation should be made with the burn treatment team on prevention and treatment modalities. In addition, there is a need for prospective studies evaluating long-term

psychiatric disorders in individuals suffering from burn trauma.

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