Self-Inflicted Burns in Patients with Chronic Combat-Related Post-Traumatic Stress Disorder

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ABSTRACT

This study examined self-inflicted burns in case series of four patients with chronic combat-related post-traumatic stress disorder (PTSD). Those patients were hospitalized in the Burn Unit of the University Hospital of Traumatology in Zagreb because of severe burns and had a premorbid psychiatric history of PTSD. Demographic data and information regarding the circumstances surrounding the incident, burn severity, treatment and outcomes of these patients were collected. The authors have analyzed possible impacts of the sensationalistic way in which media present cases of self-inflicted burning that induce other, new cases of this suicide type, known in the literature as »Werther’s syndrome«. The importance of multidisciplinary approach in the treatment of burn patients is stressed with emphasis on the important role of liaison psychiatrist in treating these patients. It is necessary to educate media people to avoid sensational reporting on this kind of events. Continuous psychiatric treatment of vulnerable individuals could be useful in prevention of self-inflicted burns.

Key words: burn patients, post-traumatic stress disorder, Werther’s syndrome, multidisciplinary approach, liaison psychiatrist

Introduction

Burns are defined as skin traumas caused by thermal, electrical or chemical agents. In patients with severe burns and their families this burn can greatly change their lives in years to come. Severe burn is an extremely traumatic experience related to long-term and painful treatment as well as reintegration into society. Burns can be inflicted accidentally or purposely – one person burns another or it can be an act of self-hurting. Self-inflicted burning is common in persons who try to escape from a stressful situation or it is a suicidal attempt. Studies have shown that self-inflicted burning, so called self-burning, is a rare suicidal method in West-European countries while those rates are lot higher in Iran, India and Zimbabwe. In the United Kingdom, the incidence of assault by burning and of self-inflicted burns increased significantly over the last decade. This has major implications both for service providers and society as a whole. Common method of self-inflicted burning is usage of open flame with accelerators (petrol, paraffin, color suspensors), which cause greatest burns and additionally cause high mortality. Body parts most affected by self-burning are the torso, upper limbs, face, lower limbs and back. Most of the patients who try or commit suicide by self-inflicted burning already have a history of mental disease and earlier suicide attempts. Disorders mostly related to self-inflicted burners are affective disorder, schizophrenia and personality disorders, but this particular act can also be caused by economical or social problems (marital problems, financial problems, job-finding problems) or recent life stress.

War experience is a significant source of stress that affects, with more or less intensity, the entire population, especially those who participated in it. Consequences are so traumatic that they significantly exceed the ability of most people to successfully cope with it. Since the war is an intentional human act, it leaves behind more severe
psychological consequences in experiencing and behav-
ing. In Croatia many war veterans developed post-
traumatic stress disorder (PTSD), and from years 1991–
2006 a total of 1,751 of them committed suicide. PTSD
patients mostly commit suicide by hanging or with fire-
arms. However, during years 2005 and 2006 a higher in-
cidence of suicide attempts in PTSD patients by self-in-
flicted burning was noticed. One of the possible expla-
nations for that could be a presence of PTSD and co-mor-
bid depression, personality disorder, psychosis, etc. The
second explanation of this noticed trend, which we be-
lieve is more likely, is induction of this kind of suicide via
media. Namely, researches have shown that self-inflicted
burning in public places is often reported on in a very
sensationalistic way, so in such a way the press and vi-

tual media actually support and popularize the concept of
self-inflicted burning in public places as a method of
social and political protest. Having this in mind, vari-
ous authors offered media instructions for more re-
 sponsible suicide reporting in order to decrease the copy-
ing rate of this violent act as much as possible.

Case Report

This study presents a case series of four patients who
were in short period of time hospitalized in the Burn
Unit of the University Hospital of Traumatology in Zag-
reb, Croatia, after sustaining severe burns by self-inf-
licted burning, and with psychiatric comorbidity of com-
battle-related chronic PTSD. The study shows patients’
characteristics, characteristics of burns (total burn sur-
face area (TBSA), burn level, the mechanism of burn in-
jury, localization), as well as the course and outcome of
treatment. Media reporting on these events was also de-
scribed, as well as reporting on these particular four pa-
tients and some other similar cases in Croatia.

S.N., male, age 34, from Koprivnica, attempted sui-
cide by self-inflicted burning on December 1st 2005 and
he was hospitalized in the Burn Unit of the University
Hospital of Traumatology in Zagreb for 56 days. The pa-
tient burned himself with gasoline and he sustained
burns on the face, both upper limbs, both lower limbs to-
gether with inhalation injury. TBSA was 30%, and burn
depth was IIB-III. During the war in Croatia, the patient
experienced a number of traumatic events and he was
treated for PTSD and alcoholism. During the treatment
of extensive burns he developed all symptoms of burn
disease with a few septic attacks. The patient was treated
for PTSD with irregular usage of psychotropic drugs.
During the hospitalization in the Burn Unit he was
treated with midazolam and later on with sertralin,
zolpidem, together with morphine and tramadol for pain.
Several operative procedures were performed as well, to-
gether with thumb amputation. Spontaneous ventilation
and hemodynamic stabilization were established after 15
days, mobilization and physical therapy were started and
after having finished treatment in the Burn Unit, the pa-
tient was transferred to the psychiatric department of a
county hospital. It is important to mention that this pa-
tient, when being in the psychiatric department,
described his suicide attempt to a psychotic female fel-
low-patient, who a few days after leaving the hospital,
tried to commit suicide in the same way – by self-inflicted
burning. After a few days of treatment in the Burn Unit
of the University Hospital of Traumatology, she passed
away.

G.K, male, age 45, from Zagreb, attempted suicide by
self-inflicted burning on April 20th 2006. The patient
tried to burn himself with gasoline and his medical his-
tory revealed that one year earlier he tried to burn down
a barn. Later on he denied both attempts and was trying
to show it as accidental incidents. The patient was being
treated for PTSD since 1995 but was using medications
irregularly. In his attempt to burn himself he sustained
burns on the head, neck, thorax, both forearms and fists,
together with inhalation injury. TBSA was 30%. He spent
17 days in the Intensive Care Unit (ICU), also with devel-
opment of complete burn disease and its complications.
Analgesics he was given included morphine and sufenta-
il, and later on morphine and oxycodon; of psychotropic
drugs he was given promazin, haloperidol and biperiden.
Three operations in terms of necrectomy and plastic sur-
urgery were performed. On May 19th, because of agitation,
consultant psychiatrist was summoned and he diagnosed
paranoid psychosis and personality disorder with comor-
bid PTSD and from pharmacotherapy he recommended
sulpirid, karbamazepin, promazin, haloperidol and clo-

azepam. The patient was released after burns rehabili-
tation. Media monitored this event by sensational report-
ing.

D.P male, age 36, tried to burn himself in a car on
April 26th 2006 and was brought to the Burn Unit of the
University Hospital of Traumatology in Zagreb. TBSA
was more than 80%, the burn degree was IIB-III. He sus-
tained burns on the head, neck, thorax, abdomen and
lower limbs. He had been treated for PTSD but didn’t take
any medications. Considering extensiveness and depth of
burns, together with inhalation injury, patient was treated
in the ICU. Despite intensive care measures and resuscitation, he died after 24 hours. This event was
on the front page of every newspaper with articles and
comments later on.

S.T male, age 44, from eastern part of Croatia at-
tempted suicide by self-inflicted burning and sustained
burns of the face, neck, larger part of the torso and limbs.
TBSA was 70%. Burn degree was IIB-III. The motive for
attempting suicide was a quarrel with his wife and un-
solved veteran status. During Croatian war he was ex-
posed to a number of traumatic experiences as a com-
mmando on the front lines and a number of his combat-
soldiers from his brigade committed suicide. For the last
three years he was being treated for chronic PTSD with
comorbid personality disorder. S.T. drenched himself with
gasoline and when policeman tried to stop him, he set
himself on fire and at the same time burned the police-
man as well. The patient was admitted to the ICU of the
Osijek University Hospital and was transferred to Zag-
reb on June 7th to the Burn Unit of the University Hospi-
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of Traumatology. Because of extensive burns with all complications related to the development of burn disease (hemodynamic instability, respiratory insufficiency, multi-organic failure, sepsis) treatment was intensive. Analgesics were administered, included morphine, sufentanil, and from psychotropic drugs he received diazepam, promazin, haloperidol and biperiden. One operation was performed, but the patient died several days later. From the first moment of this injury media were covering this incident on front pages for several days, accompanied by TV news, sensational reporting with photos, provoking compassion, denunciation of state institutions etc.

This case report presents several self-inflicted burn cases among Croatian war veterans treated for chronic PTSD. It is noticeable that all off them sustained extensive burns and had many complications in terms of developing actual burn disease. It has been shown that self-inflicted burns could be much more dangerous and have a more drastic outcome than other burns, that is, those burns are larger and patients with self-inflicted burns spend more time in hospital, with higher mortality rates. In those cases series of patients, the way of burning is similar, all patients were of the same gender and similar age and most of them didn’t have a solved war-veteran status. The extent and the depth of the burn injuries could explain the high mortality rate seen in these patients. It is also noticeable that they didn’t regularly consume medications that were prescribed to them by psychiatrists and that, besides PTSD, they had some other associated psychiatric diagnoses.

What is the possible reason for higher incidence of suicide attempts in PTSD patients by self-inflicted burning? One of the possible explanations would be a presence of different comorbid psychiatric disorders beside PTSD, such as personality disorders and psychosis. Another possibility is that after such a case is reported by media, this specific person or his family gets more attention and support from society and various privileges or awards. In this way self-inflicted burning is promoted as a legitimate way of protest, as if it were something normal and common. Many Croatian war veterans have different problems and sometimes they feel jeopardized and resigned so it’s possible that they feel that self-inflicted burning may be an efficient way to get out of this frustrating and degrading situation, especially because this kind of acts attracts great media attention.

According to Phillips’ researches, suicides that get great media attention can serve as a trigger for future suicides, that is, they can induce imitation of a sensationally reported act. Subsequent phenomena called Werther’s effect is closely related to the theory of social learning according to which media exposed act serves as a model that people with suicidal tendencies tend to use by identifying with a person that did it, so they are encouraged to do the same thing as a person who gained media attention. Besides, it has been shown that copying of suicidal method will be higher in accordance with greater attention that press media give to a certain act. Phillips’ researches have also shown that suicidal rate was increased by 12% after Marilyn Monroe committed suicide, that public reports of suicides of ordinary people also increase suicidal rate, that public reports of homicide-suicide increase the rate of fatal car and plain crashes and that after reporting natural death of celebrities the suicide rate doesn’t increase, which shows that grief itself is not an impact factor. Things mentioned above show that publicity is significant and that media play the important role in inducing and inhibiting suicides.

In addition to the presented cases, there were few more cases of self-inflicted burning in Croatian war veterans reported in media. For instance, on April 1st 2005 a Croatian war veteran started a hunger strike because of his unsolved status and ended it after the agreement was made. But afterwards, when the state secretary said on local television that he didn’t submit his documentation on time, he gave them an ultimatum that either will the minister of veterans come to his place or he will commit suicide by setting himself on fire. He doused himself with gasoline and switched the lighter, but the police managed to prevent the tragedy. State secretary apologised via media saying that he mistakenly looked at some other veteran’s documentation instead of his. A few days later, on April 6th 2005, former tank driver in guardian brigade in other part of Croatia doused himself with gasoline, drank gasoline and burned out. Besides PTSD he had a severe mental disease. The very psychotic state with PTSD symptoms contributed to the bizarre way of self-inflicted burning and he was more suggestive to media. He was unemployed, without family and any income except for small social allowance and a small pension from his father. According to his sister’s words, he unsuccessfully tried to solve his status as a disabled war veteran to get a pension. His family gave statements for media on several occasions about his death being connected to solving his status with open accusations directed towards state institutions. His sister also told the media how he was inspired to self-inflicted burning by a recent case when a war veteran tried to set himself on fire. All these events were followed by media on front pages, main television news, but all without consulting professionals, emphasizing how these people have nothing else left to do because of state inefficiency. This trend continued and on December 6th 2006 another veteran threatened to set himself on fire. All these events were followed by media on front pages, main television news, but all without consulting professionals, emphasizing how these people have nothing else left to do because of state inefficiency. This trend continued and on December 6th 2006 another veteran threatened to set himself on fire because of unsolved existential problems. Only after hours of negotiating with media and highly positioned politicians he gave up. On January 5th 2007 the policeman in Zagreb also succeeded in preventing a Croatian war veteran to commit suicide. He doused himself with gasoline and threatened to burn himself. Using successful negotiation, a policeman prevented the tragedy and took the man into the custody. The motive of his threat was the fact that he had been thrown out of his apartment. It is interesting to say that patients were of the same gender, similar age, and they also had similar motives for suicide and the same psychiatric diagnosis.

A huge problem in treating these patients is burn pain. Burn pain is one of the most complex and most i-
tensive pains in clinical medicine in general, and its treatment represents a great challenge to professionals. Acute pain often transfers into chronic one, and in addition to somatic and visceral, it also has a neuropathic component. Strong opioid analgesics are used in the treatment of burn-related pain. The usage of psycho-pharmacetics is also a great challenge, especially in the patients with the already existing premorbid diagnosis of PTSD, or even a psychiatric disorder in some cases. Psychiatrist has to be well acquainted with side affects of these medications, as well as their interaction with other medications, especially because of the frequently extremely severe clinical picture and vital endanger of a patient. When treating these patients, principles of rational polypharmacy should be used. With regard to the complexity of psychological disorders in certain phases of the treatment, and burn disease as an often life-threatening condition, the liaison psychiatrist helps other team members in the process of diagnostics, conceptualization and treatment of burn patients to choose most adequate therapeutic strategies designed in accordance with individual needs of every patient in the specific phase of treatment. Suicide shouldn’t be shown in media as a justified act or act of courage, and it would be mandatory to avoid reporting on act details. More attention should be directed to negative concurrent consequences of the committed act, and photographs of a person attempting or committing suicide or place of suicidal act should never be shown. With regard to the fact that people tend to imitate one another, doing good or bad things, it would be good if media, as a strong socializing factor, could try to make a balance between violent and non-violent, positive stories. Since suicides and suicide attempts are often performed in the interregnum between psychotrauma and inability to find adequate coping strategy, reports and articles appearing in the media may affect the choice of negative coping strategy and so induce suicide as the only way out. In addition to well-organized programs and professionally ethical articles in daily press, it is possible to make a significant contribution towards a positive change in the attitudes in terms of promoting vital and social motives, and consequently reducing suicide rates.

**Conclusion**

Burn care professionals should be familiar with self-inflicted burn patients who have comorbid chronic PTSD and require constant psychiatric support in addition to burn care. The liaison psychiatrists have a wide range of activities in the treatment. With rational usage of psychotropic drugs and with appropriate psychotherapeutic interventions, the psychiatrist participates in reduction of psychiatric symptomatology, together with improvement of patients’ quality of life. Better knowledge of specific risk and protective factors would be a great benefit in understanding psychological health after trauma in general, as well as in development of instruments to identify patients with higher risk. In order to create an anti-suicidal atmosphere in the media, it is necessary to organize professional education of persons responsible for programs and articles in media so that principles of positive coping strategy can be taught to media people.

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