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Depression Affected by Burns Injury: A Narrative Literature Review

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A B S T R A C T

Burn-related pain during surgical procedures and physical rehabilitation is associated with anxiety, and studies have shown that procedural pain-associated anxiety increases as therapy progresses. This literature review aimed to describe depression-related burn injuries. Burn scars often lead to disfigurement, potentially causing an altered body image, lack of adequate social functioning, and poor quality of life for the patient. Subjective body image dissatisfaction is an essential predictor of post-burn psychological functioning 12 months post-injury. Psychiatric problems are pervasive in burn survivors. A range of psychological problems, such as anxiety, depression, low self-esteem, and trauma-related disorders, can occur in these patients. The severity of burns, total body surface area involved, site of burns, and burn depth all have a role in developing psychiatric problems. Social and environmental factors may also play a part in the genesis of psychiatric sequelae. In conclusion, burn patients should be routinely screened for psychiatric morbidity, and that all cases be assessed by a psychiatrist at least once during their inpatient stay. Sensitization of the burns ward staff to the patient's psychological needs is equally important.

1. Introduction

Burn injuries are caused by applying heat, chemicals, electrical current, or radiation to the external or internal surface of the body, which destroys the tissue.[1] Burns are acute, unpredictable, and devastating forms of trauma that affect the victim's physical and psychological health.[2,3] A patient who suffers from burn injuries can be subjected to various mental and psychological conditions that can adversely affect their health and well-being. Understanding the nature of their ailment and its impact on their health involves a detailed study of the nature of the burn, socioeconomic factors, personal life, and reason for the injury. These terrible life events cause extreme stress in these patients. With improving medical care, many patients survive the acute phase of recovery. They are left to deal with the long-term psychological effects of burns, which are complex and vary from patient to patient. The most common psychological problems faced by burn injury patients are pain, anxiety, depression, post-traumatic stress disorder, concern about bodily disfigurement, social isolation, and financial burden due to the prolonged duration of hospitalization and treatment required.[4,5] This literature review aimed to describe depression-related burn injuries.

Burn injury-related psychological problems

Burn-related pain during surgical procedures and physical rehabilitation is associated with anxiety, and studies have shown that procedural pain-associated anxiety increases as therapy progresses.[6] Pain, anxiety, and distress are known to be associated with post-traumatic stress disorder in burn victims. In

contrast, patients with higher rates of anxiety report more intense background pain on subjective assessment.[7,8] Predisposing factors such as grief and mourning, pain, social isolation during hospitalization, and pre-burn depression have been associated with post-burn depression.[9,10] Burn scars often lead to disfigurement, potentially causing an altered body image, lack of adequate social functioning, and poor quality of life for the patient. Subjective body image dissatisfaction is an essential predictor of post-burn psychological functioning 12 months post-injury. A more extended stay in the hospital has been associated with more excellent social isolation, a sense of loss of independence, economic dependency, loss of socio-occupational functioning, and increased distress in patients. Despite the overlapping interface between burn injuries and psychiatric morbidity, psychological help for burn patients is still under-addressed, and there is a need for a psychiatric team in the burn unit.

Potential factors contributing to a higher prevalence of anxiety in males could be a fear of disfigurement, worries about the future and return to work, and the high treatment cost.[10-12] Analysis of the relationship between the grade of burn and depression showed that the extent of total body surface area (TBSA) involved did not have any bearing on the severity of depression in the subjects. This was in keeping with the findings reported in the literature. The same was valid for anxiety. This, however, was in contrast with literature showing a positive association between total body surface area involved and severity of anxiety. In keeping with previous research, the association between facial burns and the severity of depression remains high, thereby showing that facial disfigurement is a risk factor for post-burn depression.[12]

Interestingly, depressive symptoms three weeks post-burn predicted patient-rated scar severity (T1), suggesting that post-burn depressive symptoms influence how people evaluate their facial scars.[2,13] In addition, depressive symptoms three weeks post-burn were related to the pre-burn history of depression and could also be influenced by the traumatic experience of a burn event. Another exciting study result was the statistically significant association between deep burns and anxiety, depression, and low self-esteem. Research shows that full-thickness burns affect body image. Patients with greater than 20% total body surface area full-thickness burns were more concerned about their health and experienced higher anxiety levels.[10] This may have been related to the longer duration of treatment, the more significant number of procedures they may have undergone, and the financial costs of treatment. Psychiatric problems are pervasive in burn survivors.[11] A range of psychological problems, such as anxiety, depression, low self-esteem, and trauma-related disorders, can occur in these patients. The severity of burns, total body surface area involved, site of burns, and burn depth all have a role in developing psychiatric problems. Social and environmental factors may also play a part in the genesis of psychiatric sequelae.[12] There is a dearth of knowledge about the psychological needs of burn survivors.[13] Future research must focus on long-term studies in diverse populations to elucidate further relationships and factors at the interface of psychiatric problems in burn injuries.

2. Conclusion

Burn patients should be routinely screened for psychiatric morbidity, and all cases be assessed by a psychiatrist at least once during their inpatient stay. Sensitization of the burns ward staff to the patient's psychological needs is equally important.

3. References

1. Akita S, Hayashida K, Takaki S, Kawakami Y, Oyama T, Ohjimi H. The neck burn scar contracture: A concept of effective treatment. Burn Trauma. 2017; 5.
2. Zweifel CJ, Guggenheim M, Jandali AR, Altintas MA, Künzi W, Giovanoli P. Management of microstomia in adult burn patients revisited. J Plast Reconstr Aesthetic Surg. 2010; 63: 351–7.

3. Spires MC, Kelly BM, Pangilinan PH. Rehabilitation methods for the burn injured individual. Phys Med Rehabil Clin N Am. 2007; 18: 925–48.
4. Giannoni-Pastor A, Eiroa-Orosa FJ, Fidel KSG, Arguello JM, Casas M. Prevalence and predictors of posttraumatic stress symptomatology among burn survivors: A systematic review and meta-analysis. J Burn Care Res. 2016; 37: e79–e89.
5. Gibran NS, Wiechman S, Meyer W, Edelman L, Fauerbach J. Summary of the 2012 ABA Burn Quality Consensus Conference. J Burn Care Res. 2013; 34: 361–85.
6. Smith MB, Wiechman SA, Mandell SP, Gibran NS, Vavilala MS, Rivara FP. Current practices and beliefs regarding screening patients with burns for acute stress disorder and posttraumatic stress disorder: A survey of the American Burn Association Membership. Eur Burn J. 2021; 2: 215–25.
7. Palmu R, Suominen K, Vuola J, Isometsä E. Mental disorders after burn injury: A prospective study. Burns. 2011; 37: 601–9.
8. Onarheim H, Vindenes HA. High risk for accidental death in previously burn-injured adults. Burns. 2005; 31: 297–301.
9. Van Loey NEE, van Son MJM. Psychopathology and Psychological Problems in Patients with Burn Scars Epidemiology and Management. Am J Clin Dermatol. 2003; 4: 245–72.
10. Menzies V. Depression and burn wounds. Arch Psychiatr Nurs. 2000; 14: 199–206.
11. Sarabahi S. Recent advances in topical wound care. Indian J Plast Surg. 2012; 45: 379–87.
12. Al Ghriwati N, Sutter M, Pierce BS, Perrin PB, Wiechman SA, Schneider JC. Two-year gender differences in satisfaction with appearance after burn injury and prediction of five-year depression: A latent growth curve approach. Arch Phys Med Rehabil. 2017; 98: 2274–9.
13. Fassel M, Grieve B, Hosseini S, Oral R, Galet C. The impact of adverse childhood experiences on burn outcomes in adult burn patients. J Burn Care Res. 2019; 40: 294–301.