

Original Research

Evaluation of psychiatric illness among burn patients

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ABSTRACT:

Background: Psychological distress is among the most frequent and debilitating complications post-burn injury. Severe trauma, burns and other critical illnesses, as well as their requisite ICU therapies expose patients to extreme physiological and psychological stressors. Hence; the present study was conducted for evaluating psychiatric illness among burn patients. **Materials & methods:** A total of 100 burn patients were enrolled. Complete demographic and clinical data of all the patients was obtained. A Performa was made and clinical examination details of all the subjects were recorded. Thorough examination was carried out and assessment of psychiatric illness among burn patients was recorded. Assessment of all the results was done using SPSS software. **Results:** Out of 100 burn patients, psychiatric illness was seen in 58 percent of the patients. Mean age of the patients was 46.5 years. Among these 58 patients, depression and post-traumatic stress disorder was seen in 20 and 25 percent of the patients respectively. In the present study while assessing the correlation of psychiatric illness with total body surface area in burn patients, significant results were obtained. **Conclusion:** Depression and post-traumatic stress disorder are the most common psychiatric illness among burn patients.

Key words: Psychiatric illness, Burn

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INTRODUCTION

Psychological distress is among the most frequent and debilitating complications post-burn injury. Preliminary reports using the Burn Model System (BMS) dataset indicated that one-third of patients with major burns had clinically significant psychological distress at the time of discharge, and the mean level of psychological distress in the BMS sample was significantly higher than that reflected in published data from a normative sample. In addition, psychological distress of in-patients of the hospital predicted significantly greater physical impairment for at least 1 year post-burn. Clinically significant psychological distress also accounted for substantial variance in concurrently assessed quality of life at 2 (58%), 6 (68%), and 12 (51%) months post-burn injury. Severe psychological distress is an important secondary complication of major burn injuries, with long-term consequences.¹⁻⁴ With advances in medical and surgical care, increasing numbers of patients are

surviving severe burn injuries, trauma, and ICU stays generally. Severe trauma, burns and other critical illnesses, as well as their requisite ICU therapies expose patients to extreme physiological and psychological stressors. Therefore, psychiatric morbidity and functional limitations are potential concerns in these patients.⁵⁻⁷ Hence; the present study was conducted for evaluating psychiatric illness among burn patients.

MATERIALS & METHODS

The present study was conducted for evaluating psychiatric illness among burn patients. A total of 100 burn patients were enrolled. Complete demographic and clinical data of all the patients was obtained. A Performa was made and clinical examination details of all the subjects were recorded. Thorough examination was carried out and assessment of psychiatric illness among burn patients was recorded.

Assessment of all the results was done using SPSS software. Univariate regression curve was used for evaluation of level of significance.

RESULTS

Out of 100 burn patients, psychiatric illness was seen in 58 percent of the patients. Mean age of the patients was 46.5 years. Majority of the patients were males while the remaining were females. Among these 58 patients, depression and post-traumatic stress disorder was seen in 20 and 25 percent of the patients respectively. In the present study while assessing the correlation of psychiatric illness with total body surface area in burn patients, significant results were obtained.

Graph 1: Psychiatric illness among burn patients

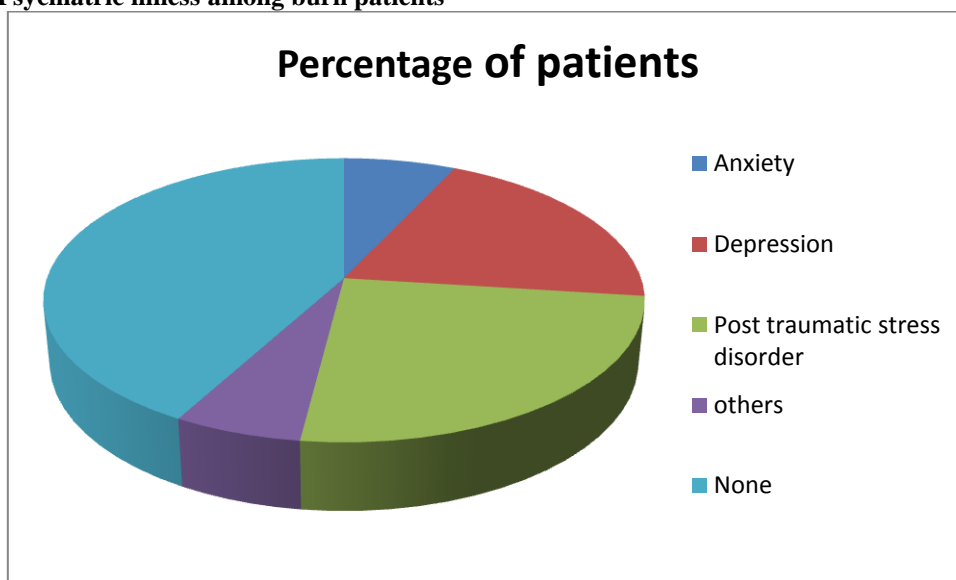


Table 2: Correlation of psychiatric illness with total body surface area affected by burns

Psychiatric illness	95% CI	p- value
Anxiety	-1.29 to 2.42	0.00 (Significant)
Depression	-2.39 to 1.85	0.01 (Significant)
Post-traumatic stress disorder	-1.39 to 1.46	0.00 (Significant)
Others	-2.36 to 2.11	0.01 (Significant)
Overall	-1.69 to 2.14	0.00 (Significant)

DISCUSSION

Burn injuries are frequent and disabling problems in most areas of the world. Psychological distress is among the most frequent and debilitating complications post burn injury. Preliminary reports using the BMS dataset indicated that one third of patients with major burns had clinically significant psychological distress at the time of discharge, and the mean level of psychological distress in the BMS sample was significantly higher than that reflected in published data from a normative sample. In addition, psychological distress in-hospital predicted significantly greater physical impairment for at least 1 year post burn.^{7- 10} Hence; the present study was conducted for evaluating psychiatric illness among burn patients.

Out of 100 burn patients, psychiatric illness was seen in 58 percent of the patients. Mean age of the patients was 46.5 years. Majority of the patients were males while the remaining were females. MG Madianos et al

explored the prevalence of psychological and psychiatric disorders among burn survivors. The sample comprised all consecutive cases of adult burn patients in a 6-month period. Personal interviews were conducted by the administration of the Langner scale and the DSM-III-R Structured Clinical Interview. Twelve months later, 30 patients of the baseline sample were reexamined. Psychological impairment was found to be 45.5 and 40% at the baseline and follow-up assessments, respectively. The extent of burns was found to be associated with psychological impairment. The prevalence of psychiatric disorders (any DSM-III nosological entity) reached 46.6% at both baseline and follow-up examinations. Posttraumatic stress disorder was diagnosed in 17.8 and 20.0% of burn survivors at the baseline and the 12-month follow-up assessments, respectively. Logistic regression analysis revealed that face disfigurement was the only burn characteristic significantly associated with the presence of

psychiatric morbidity. The results of the study suggested that the extent of burns is not so important when compared to the possibility of disfigurement from the point of risk of developing a psychiatric disorder.¹⁰

In the present study, among these 58 patients, depression and post-traumatic stress disorder was seen in 20 and 25 percent of the patients respectively. While assessing the correlation of psychiatric illness with total body surface area in burn patients, significant results were obtained. Fauerbach JA et al identified potentially modifiable in-hospital symptoms predictive of long-term distress (physical, psychological, and social impairment). They obtained data from the Burn Model Systems project, a prospective, multisite, cohort study of major burn injury survivors. The Brief Symptom Inventory (BSI) was used to assess symptoms in-hospital (n = 1232) and at 6 (n = 790), 12 (n = 645), and 24 (n = 433) months post burn. Distress was examined dimensionally (BSI's Global Severity Index (GSI)) and categorically (groups formed by dichotomizing GSI: T score ≥ 63). Attrition was unrelated to in-hospital GSI score. Significant in-hospital psychological distress occurred in 34% of the patients, and clinically significant and reliable change in symptom severity by follow-up visits occurred infrequently. Principal components analysis of in-hospital distress symptoms demonstrated "alienation" and "anxiety" factors that robustly predicted distress at 6, 12, and 24 months, controlling for correlates of baseline distress.¹¹ Ptacek et al focussed on procedural pain during hospitalisation as it is related to adjustment at 1 month post-discharge in 43 patients treated at a major regional burn centre. Using the Brief Symptom Inventory (BSI) and the Sickness Impact Profile (SIP), patients with higher pain scores (based on a composite of several measures over time) showed poorer adjustment on these measures after 1 month.¹²

CONCLUSION

Depression and post-traumatic stress disorder are the most common psychiatric illness among burn patients.

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