Facial trauma patients with a preexisting psychiatric illness: a 5-year study

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Objectives. The aim of this study was to identify and assess the demographics and presence of preexisting psychiatric disorders in an adult patient cohort admitted for the management of a facial injury.
Study Design. The analysis included demographics, type of facial injury, length of hospital stay, and psychiatric diagnosis according to criteria as set out in the DSM-IV-TR-2000.
Results. We identified 71 patients who had confirmed psychiatric comorbidity. A range of intentional, unintentional, and recidivist injuries were identified. We found a significant association between length of hospital stay and the number of diagnostic categories of preexisting psychopathology ($P < .05$).
Conclusions. This study further confirms that there is a subgroup of facially injured patients with preexisting psychiatric illness which often goes unrecognized and untreated. Early recognition, together with appropriate referral to and management by liaison psychiatry may play an important role in reducing the rate of facial trauma recidivism. (Oral Surg Oral Med Oral Pathol Oral Radiol 2013;116:e368-e374)

Events causing injury are generally thought to be random and unpredictable, often considered to be accidents beyond the control of the victim. However, a proportion of trauma patients may be victims of their own impulsive, self-destructive, or high-risk behavior. These actions are often the result of impaired judgment, outbursts of anger or violence, and low appreciation of the consequences of their conduct. Such traits are also common denominators of an underlying psychiatric disorder.

There is a well defined subgroup of facially injured patients who present with a preexisting psychiatric disorder.[1] These mental health disorders remain an underconsidered aspect in the assessment and management of such patients.

We recently published the findings of our preliminary investigation into the presence of preexisting psychologic comorbidity in a group of facially injured patients.[1] Of the 300 patients included in that 21-month study, 16 were identified as having a preexisting psychiatric diagnosis. In view of the fact that only those facial trauma patients who received formal psychiatric input during their admission were included in the study, the authors suspected that the figure of 16 patients was likely to underestimate the true prevalence of psychiatric illness in this patient group.

The early identification of psychologic symptoms in patients who present with a maxillofacial injury allows for timely intervention and accordingly optimizes their recovery. Identifying and managing psychological symptoms would help to stabilize premorbid (preinjury) psychiatric illness. It would also potentially help to improve patient compliance, decrease the risk of reinjury, and decrease the likelihood of posttraumatic stress or maladaptive coping strategies that may develop. That is, traumatic events and their psychosocial sequelae (e.g., anxiety, depression, dysfunction, deformity, chronic pain) may further exacerbate mental illness. In addition, pretrauma personality inadequacies may adversely affect patients' coping mechanisms and, in turn, may contribute to stress reactions and susceptibility to stress-related disorders.[2]

Regrettably, studies have shown that clinicians poorly consider and document psychologic problems in patients who have sustained a facial injury.[3] Additionally, staff who work within various trauma fields would

Statement of Clinical Relevance

Preexisting psychiatric illness in facially injured patients often goes unrecognized. Oral and maxillofacial surgeons are ideally situated to recognize this complex. Early recognition together with appropriate referral may play an important role in reducing the rate of facial trauma recidivism.

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appear to have a limited knowledge of the possible psychologic sequelae that may result after an episode of trauma.[4]

The psychiatric classification used in the present study is the system of the American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV). The DSM-IV is a multiaxial system that organizes each psychiatric diagnosis into 5 dimensions (axes) relating to different aspects of the disorder. The 5 axes of DSM-IV are I) clinical disorders (all major mental disorders); II) underlying pervasive personality disorders and mental retardation; III) somatic (nonmental) medical conditions; IV) psychosocial and environmental; and V) global assessment of functioning.

The aim of the present study was to further identify and assess the demographics and presence of preexisting psychiatric disorders in an adult patient cohort who were admitted to a tertiary referral hospital for the management of a facial injury.

STUDY DESIGN

The findings of a previously published retrospective chart audit (21-month period) were combined with a prospective audit (39-month period) to further investigate the evidence of preexisting psychiatric comorbidity in consecutive adult public admissions to the Maxillofacial Surgery Department, John Hunter Hospital (JHH). JHH is the tertiary referral center for Hunter New England Area Health and serves a population of 840,000 people.

This region is characterized by both an urban-metropolitan population (n = 500,000) and a rural-remote population (n = 340,000). JHH functions as a tertiary referral center, a trauma center, and a university teaching hospital.

Psychiatric diagnosis was defined according to criteria as set out in the DSM-IV text revision of 2000 (DSM-IV-TR2000). Psychiatric diagnosis was assessed at admission. Subjects recruited into the study were identified as having a pretraumatic psychiatric diagnosis as formally established by psychiatry-trained staff. At our institution, trauma patients who did not fulfill the criteria for hospital admission also did not meet the criteria for assessment by the liaison psychiatry team. As such, facial trauma patients with "minor injuries" who were discharged directly from the emergency department were not included in this study. Similarly, polytrauma patients not admitted directly under care of the maxillofacial team, i.e., those admitted to intensive care unit who were intubated and ventilated with concomitant injuries (head injury and multisystem failure); their general condition precluded mental state assessment, and as such they could not be included in the study.

Data collected and analyzed included demographics, injury type, length of hospital stay, and psychiatric diagnosis. Student *t* test was used to compare mean length of hospital stay between patients who met the criteria for a single DSM-IV psychopathology and those patients who met the criteria for ≥2 preexisting psychiatric disorders.

All patients recruited in this study were identified as having either features suggestive of psychologic disturbance, a documented past history of mental illness, a self-harm facial wound, or a positive toxicology screen for substances of abuse or currently taking prescribed psychiatric medication (mood stabilizers, antidepressants, antipsychotics). In those patients without a documented history of mental illness, with features suggestive of a mental illness, pretraumatic psychopathology was confirmed after full in-house psychiatric consultation.

RESULTS

The clinical details of all 71 patients are summarized in Table I. The cohort was predominantly adult male (n = 58) with an overall median age of 31 and a bimodal distribution of 20 and 37 years (range 17-83). A broad spectrum of both soft and hard tissue facial injuries were represented within the patient cohort. A range of intentional, unintentional, and recidivist injuries were identified. In the context of adult facial injury admissions, this study revealed that there is ~1 premorbid psychiatric presentation per month that would require a consultation liaison psychiatry referral.

The most common axis I diagnosis identified was mood disorder (n = 47), followed by substance abuse/dependence (n = 23) and schizophrenia (n = 17). Of the axis II diagnoses identified, there were 5 patients presenting with borderline personality disorder, 5 patients presenting with antisocial personality disorder, and 1 patient with a diagnosis of narcissistic personality disorder. Intentional injuries accounted for 57 presentations (assault 51, self-harm 4, suicide attempt 2), and there were 14 unintentional injury presentations. Within the 71 patients, 7 were recidivist injuries representing after successful surgical management and discharge, 2 of which had multiple readmissions and underwent multiple surgical interventions during the study period.

We found high rates of alcohol or other drug abuse problems among this subgroup of 45 patients. In this study, patients with substance abuse comorbidity also had a relatively high percentage of intentional facial injuries. Of the 23 patients admitted with facial injury