

Maxillofacial Trauma and Psychological Stress

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Maxillofacial trauma, the hard and/or soft trauma to the maxillofacial region, may involve fracture of dental tissue, the mandible [1,2,3,4], zygomatic bone [1,2,3,4], maxilla [1,2,3,4], nasal [1,2] and frontal bone [1,2,3]. There may also be concomitant abrasion [5,6,7], laceration [5,6,7,8] or contusion of soft tissues [5,6,7]. It is often a painful experience in body and soul, given that it could easily be a life and death experience from sports [1,9], falls [1,5,9,10], physical contact [1], violence [10], ... to road traffic accidents [1,5].

Treatment for maxillofacial trauma may vary from simple observation [11] to splinting [2,9], wiring [2,9,11], extractions [9], or open [8,9,11]/ closed reduction [8,11] with/ without internal fixation with bone plates [8, 9, 11]. Each stage of management from the initial presentation, treatment and rehabilitation and recovery and follow-up may all pose severe blows to the already traumatized patient. Such patients may be faced not only with aesthetic [20] but also functional issues [16,20].

Single or multiple surgical interventions may be necessary. Eventual healing and rehabilitation could feel forlorn with uncertain outcome. On top of all these, other boggling issues include financial ability [13], social aspect [12], employment issues [12,13] and underlying medical issues [13], etc. A lot of such trauma patients tend to be associated with increased social anxiety and avoidance [14,15], depression [14,15], low self-concept [12,16], problems with relationships [12] and difficulties with employment [15]. All these does appear to negatively impact on the quality of life of such patients [16,17,18].

Often, cultural acceptance [12] and social support [17] plays an important role in the psychological wellbeing of such patients [12,19]. Consequently, it is not difficult to imagine that patients suffering from maxillofacial trauma could have adjustment and adaptation issues stemming from both the trauma and treatment for the trauma [13]. Some such patients may have to come to terms with change in appearance [12,18], aesthetics [12] and functional

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issues [13,14,16] that may correlate more to the subjective severity of either the surgical operation or outcome [14,15,19,20].

It had been reported that the degree of anxiety in patients was directly proportional to the magnitude of injury and the resulting scar [18]. There has been technological advances to avoid scars [2,11]. On the other hand, it has been reported that approximately 20% - 40% of patients suffering from maxillofacial trauma may still develop post-traumatic stress disorder [13-15,20]. Islam et al's study [20] has shown a nine-fold increase in the risk of depression (odds ratio of 9.02) and a two-fold increase in anxiety disorder (odds ratio or 2.68) in participants with facial trauma. Similar results were obtained in Gandjalikhan-Nassab et al's 2016 study [18].

One resulting concern for the healthcare team is that psychological stress of patients may potentially complicate recovery and adversely affect patient compliance [20]. As such, assessment and provision of psycho-emotional support to patients suffering from maxillofacial trauma, an area less studied, has been gaining interest and importance and protocols put forward [12,13,18,19].

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