ORIGINAL RESEARCH

Psychological impact and management on maxillofacial trauma patients compared with healthy volunteers

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INTRODUCTION

Maxillofacial fractures are drawing the attention of healthcare professionals as there is an increase in incidence and related injuries. Maxillofacial injury causes the both objective and subjective changes in the face visibly. This appearance can cause mental health difficulties, with psychological disorders such as depression, and anxiety which are more prevalent.There are strong correlations with the correlations between and bad psychosocialability. This condition is often associated with morbidity and agreement thoughhumansconsider that face considersal component of one personality and the body image.[1] Medical treatment may repair the bones that are broken. Many of the patients continue to be at a risk of re- injury or poor psychological outcomes because there is a lack of evaluation in their mental health post traumatic.

The treatment of such patients may vary depending on one or more interventions. We deal with many factors that directly or indirectly affect the psychological state and reduce the quality of life. There are social anxiety, avoidance, low self-esteem, relationship problems, adaptation problems, change, adjustment, employment problems, etc. It is concluded that between 20% and 40% of patients with PTSD experience symptoms of PTSD [2].

The symptoms of post-traumatic stress disorder (PTSD) can have a negative impact on a patient's body image, quality of life, and self-esteem due to anxiety and depression, and many patients face an unpredictable adjustment process.Unless recognized and treated, it may become chronic.Thus, the result of the surgeon's work is not only about surgical skills. 、 recognize that it is not only a variety of social consequences, but also a psychological factor.[3]

In the comprehensive health care evaluation of patients, it is necessary to focus on the quality of life. This is because this problem affects the overall health of the examinee. If not treated, they may persist for a long time. Unfortunately, the treatment effect of facial bone reconstruction and fixation is based only on clinical quality indicators. It has not been regularly evaluated in clinical settings. [4] Despite the high interest in researching the psychological effects of exposure to India. The literature on the psychological effects of trauma has been neglected.

Despite the vast amount of research and information on facial disorders, there is a need to research the patterns and degrees of such disorders and develop various treatment approaches. Based on the screening level of the disorder, it uses a reliable and effective means of screening for anxiety disorder, diagnosis of Psychiatry and symptoms related to PTSD, and is supported by multiple researchers.[5,6]

MATERIAL AND METHODS:

A total number of 75 patients were taken in the study undergone the facial trauma surgery at a department of oral and maxillofacial surgery. The inclusion criteria od study is the patients between age group 18-55years, had facial injuries and normal psychological status pretrauma.Exclusion Criteria: the patient is not in the age group of 18- 54 years and non - operative and hasthe abnormal psychological status of pretrauma. The comparative group of healthy volunteers that were of either sex and age-matched with the participant.

The questionnaire form include the postsurgery questions related to embarrassment, speech, meal interruption, difficultyrelaxing, irritability and related to occupational dysfunction. Etiology of fracture, site of fracture, and treatment undergone questions were put on. The posttraumatic diagnostic scale was used as it is a bried self reporting questionnaire developed for the diagnostic screening and assessment of the severity of PTSD.

Statistical analysis were used for data analysed with the standard deviation for normally distributed variables.

RESULTS

In this study the total 75 patients were involved of maxillofacial fracture surgery. The patients were evaluated after 15 days of the posttraumatic surgeries. In this 65 were males and 10 were females. The mean age of the patients in this study was approximately 35 years. The most commonly affected age group was the third decade of life and followed byfourth decade. The treatment received in the surgery in mentioned in table 1. The quality of life are compared with the normal volunteers are mentioned in Table 2 and the accident types are mentioned in the Figure 1.

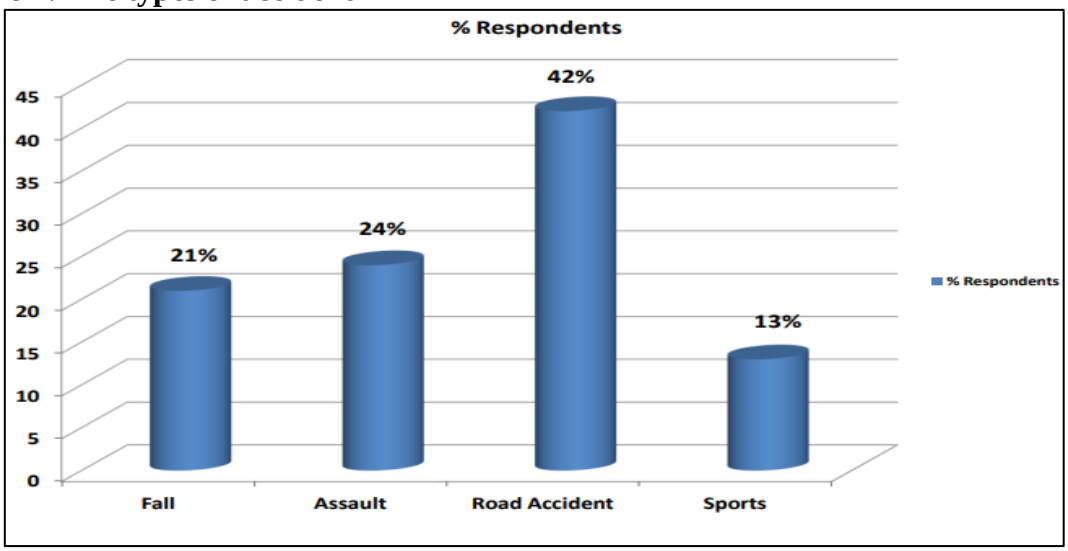
Table 1: Treatment types of maxillofacial fracture

Treatment Types	n (%)
Closed reduction	45(58.0)
Open reduction and internal fixation	30 (42.0)

Table 2: The mean difference in quality of life between patients and control healthy volunteers

Variable	Patient (n=75)	Control (n=75)
quality of life	1.89±0.55	4.46±0.51
quality of health	1.93±0.72	4.68±0.51
Health domain	34.50±9.20	85.70±6.60
Psychological domain	37.40±14.30	85.80±6.60
Social relationships domain	21.30±6.65	62.40±8.10

Figure 1: The types of accident



DISCUSSION

In the current study, the effect of psychological, social and quality of life of patients with the maxillofacial fractures was studied, in the study the total 75 patients were involved according to inclusion and exclusion criteria of the study. Trauma often alters a patient's physical and psychological well-being in unexpected ways. When the patients were evaluated for the study, according to the data obtained from Figure 2, 8% required intervention, counseling and immediate psychological treatment, and 32% required psychological, social and quality of life care. There was a need. Finally a proper treatment. These patients generally responded positively to the hypersensitivity question. Severe sleep deprivation, discomfort, distorted/tainted thoughts and ideas about events, shyness, and inability to relax in normal environments.[7-9]

These findings may contribute to depression, PTSD, and acute stress disorders in up to 40% of patients. As the literature on traumatic stress shows, injuries can disable people in terms of physical, mental, and social functioning. Not only is this one of the outcomes,it also appears to be the outcome most likely to be corrected with appropriate psychological interventions. emphasizes the need to assess, identify and treat psychological problems, stating that psychological needs delay the recovery of physical and psychological health and function.[10]

Trauma research is increasingly elucidating factors that predict post-traumatic psychiatric disorders. This study identifies several factors that should be included in a comprehensive initial assessment, such as psychological status and the resulting impact on social life. This reflects the complex interplay of injury, patient, and situational factors in the etiology of psychological reactions.[11] Often, patients with facial trauma may express dissatisfaction with their facial appearance after facial trauma leading to social isolation. Several studies of facial trauma have found that the degree of pain is directly proportional to the severity of the injury and the resulting scarring. Other studies have shown that the patient's perception of facial deformity is an important factor in the development of symptoms of depression and anxiety.[12,13]

Furthermore, clinical assessment of injury severity does not predict future PTSD. Early identification of patients affected by factors that trigger posttraumatic reactions is also important, as many patients may not realize their injuries are life-threatening.[14] In injured patients, using urgent care visits as an opportunity to screen for psychiatric problems may increase the risk of behavioral disorders, lead to injury, and interfere with full recovery. Errors can produce better results.[15]

Recognizing the potential for posttraumatic reactions following maxillofacial trauma may have implications for resources and practice. If such reactions are treated quickly and effectively, non-adherence to facial injury treatment can be limited and recovery rates can be improved. In hindsight, psychological factors other than physical injury can be considered that can be equally detrimental to recovery,[16,17] and the stage of the lesion can be determined. There is a particular need for innovative and cost-effective programs that integrate medical and psychological care. Interventions such as motivational interviewing, a brief form of counseling that helps people develop positive behavior changes that can be offered to patients in the days following a facial injury, can have positive results.[18-21]

CONCLUSION

The study shows the psychosocial issues that are produced due the maxillofacial surgery trauma. There is a high risk of psychological distress and an impact on patients' qpatient's life with maxillofacial surgeries. Clinical implication indicates that the surgeons should be experienced with behavibehaviorals that can be easily assessable so that the mental health services in the care of patients with facial surgeries.

REFERENCES

1. Moi AL, Vindenes HA, Gjengedal E. The experience of life after burn injury: a new bodily awareness. J Adv Nurs. 2008;64(3):278-286.
2. Moss T. The relationships between objective and subjective ratings of disfigurement severity, and psychological adjustment, Body Image. 2005;2(2):151-159.
3. Fonseca RL, Walker R, Betts NJ. Oral and Maxillofacial Trauma. 2th ed. Philadelphia: WB Saunders; 1997
4. Kapoor P, Kalra N. A retrospective analysis of maxillofacial injuries in patients reporting to a tertiary care hospital in East Delhi. Int J Crit Illn Inj Sci 2012;2:6-10
5. Oji C. Jaw fractures in Enugu, Nigeria, 1985-95. Br J Oral Maxillofac Surg 1999;37:106-9.
6. Bali R, Sharma P, Garg A, Dhillon G. A comprehensive study on maxillofacial trauma conducted in Yamunanagar, India. J Inj Violence Res 2013;5:108-16.
7. Shepherd JP. Strategies for the study of long-term sequelae of oral and facial injuries. J Oral Maxillofac Surg 1992;50:390-9.
8. Hull AM, Lowe T, Devlin M, Finlay P, Koppel D, Stewart AM. Psychological consequences of maxillofacial trauma: A preliminary study. Br J Oral Maxillofac Surg 2003;41:317-22.
9. De Sousa A. Psychological issues in acquired facial trauma. Indian J Plast Surg 2010;43:200-5.
10. Nwashindi A, Dim EM, Saheeb BD. Anxiety and depression among adult patients with facial injury in Nigerian Teaching Hospital. Int J Med Biomed Res 2014;3:5.
11. Upendra Paswan. A Prospective Assessment of the Psychological Distress and Caregiver Burden Among Care Givers of Schizophrenia Patients., International Journal of Pharmaceutical and Clinical Research 2022; 14(2); 112-119.
12. Laskin DM. The psychological consequences of maxillofacial injury. J Oral Maxillofac Surg 1999;57:1281. 12. Glynn SM. The psychosocial characteristic and needs of patients presenting with orofacial injury. Int J Oral Maxillofac Surg Clin North Am 2010;22:209-15.
13. Anil kumar Sinha et al. Assessment of Analgesic Efficacy of Femoral Nerve Block and IV Fentanyl in Femur Shaft Fracture Patients for Positioning them for Neuraxial Block: Randomized Prospective Study., International Journal of Pharmaceutical and Clinical Research 2022; 14(2); 357-362.

14. Glynn S.(2010) The psychosocial characteristics and needs of patients presenting with orofacial injury. Oral and Maxillofacial Surgery Clinics of North America. 2010;22(2):209-215
15. Glynn SM, Shetty V, Elliot-Brown K, et al. (2007). Chronic post traumatic stress disorder after facial injury: A 1 year prospective cohort study. The Journal of Trauma.;62:410-418
16. Harvey AG, Bryant RA.(1999). The relationship between acute stress disorder and posttraumatic stress disorder: a 2-year prospective evaluation. J Consult Clin Psychol.;67:985-8.
17. Herman JL.(1992) Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. Journal of Traumatic Stress.;5:377-391.
18. Young C. 2018. Maxillofacial Trauma and Psychological Stress, Journal of medical and psychological trauma:1(1):14
19. Zigmond AS, Snaith RP (1983). The Hospital Anxiety and Depression Scale. Acta Psychiatr Scand . 67: 361–70.
20. Zoellner LA, Roy-Byrne PP, Mavissakalian M, Feeny NC. Doubly (2019).Randomized Preference Trial of Prolonged Exposure Versus Sertraline for Treatment of PTSD. Am J Psychiatry 2019; 176:287.
21. Raskind MA, Peskind ER, Chow B, et al.(2018). Trial of Prazosin for Post-Traumatic Stress Disorder in Military Veterans. N Engl J Med 2018; 378:507.