Psychological issues in acquired facial trauma

Avinash De Sousa

Abstract

The face is a vital component of one's personality and body image. There are a vast number of variables that influence recovery and rehabilitation from acquired facial trauma many of which are psychological in nature. The present paper presents the various psychological issues one comes across in facial trauma patients. These may range from body image issues to post-traumatic stress disorder symptoms accompanied by anxiety and depression. Issues related to facial and body image affecting social life and general quality of life are vital and the plastic surgeon should be aware of such issues and competent to deal with them in patients and families.

Keywords: Acquired facial trauma, psychological, face disfigurement

INTRODUCTION

The face is often the seat of recognition for a human being and living with a change in the appearance of one's face as a result of injury, disease, burns or trauma is always a challenging task. Various medical, personal, social and psychological variables influence the process of adaptation and it is often difficult predict the course of adaptation in many cases.[1] It is important that the plastic surgery treatment team be aware that the ultimate goal of their work, improving patient quality of life, is determined not only by their surgical skills but also by a range of social and psychological factors. The present review aims to highlight the various psychological issues in facial trauma and to encourage higher standards of care for patients with acquired facial disfigurement, in-cluding paying of attention to psychosocial rehabilitation.[2]

The psychological aspects in patients with acquired facial may not be completely addressed by the plastic surgery treatment team alone. The primary goal of plastic surgeons is to provide patients with the highest standards of surgical care and most members of the team have not been given adequate training to address psy-chosocial concerns. In addition there has not been enough research on the psychosocial responses and variables affecting the forms of acquired facial disfigurement.[3] The present review addresses one distinct form of facial disfigurement acquired during adulthood, i.e. acquired facial trauma and not at facial disfigurements through other causes like cancer or congenital anomalies. It is well know that psychological issues in response to acquired disfigurement are different and more pronounced than that to congenital craniofacial disfigurement. Patients with acquired facial trauma are likely to have some unique psychological characteristics.[4] We review the psycho-logical adaptation specific to facial trauma and discuss certain aspects of adaptation by individuals due to this ac-quired facial disfigurement, i.e. challenges in social functioning, body image issues, depression, anxiety and possible psychological morbidity.

PSYCHOLOGICAL MORBIDITY OF PATIENTS WITH ACQUIRED FACIAL TRAUMA

The psychological needs of patients with acquired facial trauma are unique. It has been noted that patients with orofacial trauma were more likely to report symptoms of depression, anxiety, and hostility when compared to a matched normal control group for a period of up to 1 year post trauma. [5] Various studies have reported that 10-70% patients based on various factors may experience symptoms of depression and anxiety after a facial trauma. [6] This may be coupled with the fact that patients with acquired orofacial trauma have psychosocial problems like unem-ployment, lower education level and poor social support. [7] The symptoms of depression and anxiety in many cases may be sub-threshold and may not meet the full diagnostic criteria of a psychiatric disorder. This may often lead to diagnostic dilemmas, poor treatment of the problem and poor intervention. Reactions such as normative sad-ness, grief over the losses they have experienced, reactions to medications they may be taking and fatigue that results from treatment may be confused to being a depressive disorder or episode. Depression places the patient at increased risk for suicide, poor compliance with treatment and poor rehabilitation outcome. This in turn will affect the quality of life and recovery from the facial trauma. [8,9]

Depression and anxiety associated with facial trauma is often coupled with worries regarding recovery and length of the treatment process.[10] Facial trauma leads to disfigurement which also affects the social image of the patient.[11] Patients may express unhappiness regarding facial appearance after facial trauma and this may often led to social withdrawal and isolation. They may feel inferior to others in social presentation and may often feel a stigma associated with facial disfigurement.[12]

Often the injuries are due to family fights and interpersonal assault, while a third of the patients have a previous history of a facial trau-matic injury.[13] The recovery process after facial trauma is often lengthy and multiple surgeries with a multidisciplinary post-operative rehabilitation process may be needed. This may add to the frustration of the patient.[14] Injuries to key areas of the face like the eyes, ears and dental injuries often increase vulnerability to stress and impede recovery.[15] Significant difficulties in returning to premorbid levels of occupational functioning have been noted in these cases.[16]

Facial trauma pa-tients also report higher rates of somatoform symptoms, substance abuse, post-traumatic stress disorder symptoms, body image issues, stigmatization, lower quality of life and lower overall satisfaction with life.[17] They also report prob-lems in marital, occupational and social functioning.[18] They also report no nec-essary correlation between the degree of disfigurement and the type, extent and severity of psycholog-ical response.[19]

It is well known that facial trauma may occur in life-threatening situations and as a result of accidents or industrial mishaps. [20] This may often herald the onset of post-traumatic stress disorder (PTSD). The primary symptoms of PTSD include (i) re-experiencing of the trauma (e.g., having intrusive and distressing thoughts and/or distressing images and dreams); (ii) avoidance of thoughts, emotions or situations related to the trauma; and (iii) autonomic nervous system hyperarousal, including difficulties with sleeping, having an exaggerated startle response and experiencing increased irri-tability and tension. [21]

There have been studies documenting the evidence of PTSD symptoms in adult acquired facial trauma patients. It is also quite possible that a substantial portion of patients might experience sub-clini-cal forms of PTSD (i.e. not meeting the full diagnostic criteria) that can nevertheless substantially affect quality of life.[22] Individuals with acquired orofacial trauma who reported PTSD symptoms were more likely to also report pre-injury psychological problems, increased levels of stress and poor social support.[23] They are also likely to be elder, female and experience more injury-related pain.[24] Identification of PTSD symptoms can lead to further ex-ploration and uncovering of previously unrecognized additional psychological symptoms like depression and anxiety disorders.[25] It is well known that most psychological symptoms after facial trauma occur more in women as facial appearance and disfigurement concerns are more prevalent in them.[26]

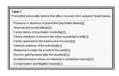
OTHER PSYCHOLOGICAL ISSUES IN ACQUIRED FACIAL TRAUMA

One study has compared plastic surgery patients undergoing treatment for facial cancer with patients undergoing reconstruction for scarring resulting from injury. Facial cancer patients reported lower levels of depression, anxiety, social concern and concern about their appearance as compared to the facial trauma patients. [27] Trauma-induced disabilities are often perceived to be random, unnecessary and unfair resulting in blaming and anger towards one's self or others as well as being associated with idealizing one's pre-injury physical appearance making the adjustment process more difficult. [28]

Additionally, facial trauma patients who have particular predisposing personality traits may be at increased risk for compromised quality of life [Table 1]. For example, higher levels of neuroticism were associated with lower quality of life and higher levels of alcohol consumption. Such problems would unquestionably complicate the process of psychologically adapting to a facial trauma, disfigurement and surgical reconstruction.[29]

Table 1

Premorbid personality factors that affect recovery from acquired facial trauma



A wide range of variables are thought to influence psychological adjustment to acquired facial trauma. These include the nature of the patient's so-cial support, presence of pre-existing psychological disorders and substance abuse problems and the extent of pain, as well as postoperative fatigue.[30] The use of passive styles of coping with the stress of the disease (e.g., through denial or avoidance) is more likely to result in more compromised quality of life.[31]

There are some other concerns that many patients with all forms of acquired facial disfigurement may have in common, that include chal-lenges in social functioning, body image adaptation and the possibility for psychological growth related to acquiring a facial disfigurement.[32] The goal of the plastic surgery team is to screen and determine if there are significant psychosocial problems affecting quality of life. If significant psychosocial problems are observed, the plastic surgery team ideally should provide appropriate feedback to the patient regarding how psychological factors can influence quality of life and be prepared to provide referrals to mental health professionals [Table 2].[33]

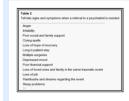


Table 2
Tell tale signs and symptoms when a referral to a psychiatrist is needed

The greatest psychosocial challenge for most patients with any kind of facial disfig-urement is learning to cope with the social response to their facial appearance. For many individuals, these constant social challenges inevitably and eventually lead to social withdrawal. Many disfigured individuals narrowly limit their range of social interactions to immediate family members and to those social contacts re-quired for occupational functioning.[34,35] In its most extreme form, social withdrawal can result in what has been termed 'social death'.[36,37]

Several extensive assessment tools have been designed to assess social functioning, including those specific to living with facial disfigurement particularly in the context of the plastic surgery consultation where the assessment of social functioning should be rather focused.[38]

Individuals with an acquired facial disfigurement experience a long-term pro-cess of body image adaptation that significantly affects their quality of life. It has been found that facial trauma patients, as compared to control subjects, reported higher rates of negative body image thoughts and greater body image dysphoria in social situa-tions.[39] The body image concerns of disfigured people, like the body image concerns of most individuals, likely fall on a continuum from those having no psychological concerns to those patients who have an extreme level concern. Patients from the middle group are the vast majority of individuals who present for reconstructive surgery. They are able to function normally and yet still experience some body image experiences that affects their quality of life.[40]

There are some patients who despite having objective disfigurement resulting from acquired facial trauma report no significant concerns regarding their appearance. [41] This may be the result of psycho-logical denial and a lack of investment in their facial appearance. Some have an extreme level of body image concern that significantly affects their quality of life. Such patients are likely to experience a range of mental health problems that are clearly evident to the plastic surgery treatment team. [42]

There is now a compelling and ever-growing body of scientific literature documenting psychological growth in response to highly traumatic experiences. [43] A number of positive and negative coping styles, resilience factors and trauma interpretation methods determine recovery from trauma. [44] While more attention needs to be given to evaluating and treating the suffer-

Psychological issues in acquired facial trauma

5/18/2016

ing of patients with acquired facial disfigurement, it should also be kept in mind that some patients will demonstrate not only remarkable resilience, but also growth in the face of their experience.[45] A very important factor in recovery from any trauma is family support and culture. It is well known that the joint family system in India provides greater social support to the

patient compared to the west where nuclear families prevail. [46] The cultural attitude towards illness, recovery, the sick role, work and disability are other factors that would help or impede

this process.[47]

PSYCHOLOGICAL PRINCIPLES FOR THE PLASTIC SURGEON

Some general principles for the psychologi-cal management of patients undergoing reconstructive surgery that are helpful must be kept in mind when handling such patients. The plastic

surgery team needs to do whatever is necessary to allow the patients and families to create realistic expectations for the anticipated surgical outcome. The team should be as clear as possible

regarding the length of time it will take to complete the reconstruction, the total number of surgeries and how much pain and life disruption will likely occur.[48]

One of the most important contributions that the treating surgeon can make to the care of patients is to take time to closely listen to their unique concerns and those of their family members

about the surgery, its outcome and their experience living with disfigurement. [49]

Many patients require little extra psychological care other than just the routine attention given. They benefit from extra time, attention and reassurance. The surgical team is clearly able, in

most instances, to adequately respond to the needs of their patients. [50] However if it is felt that the patient and the family can be helped further by interacting with a psychiatrist, such a

meeting should be facilitated.

There has been some progress made in addressing the specific psychosocial concerns of individuals with facial dis-figurement, including addressing the need for social skills development,

learning how to adaptively cope with persistently negative social response, applying the particularly efficacious cognitive-behavioural forms of intervention to the specific concerns of those

living with disfigurement and developing and disseminating effective psycho-educational materials.[51]

CONCLUSION

It is important to emphasize that the most important ways in which the treatment team can enhance patients' psychosocial rehabilitation is to be aware of the published clinical literature on

the psychosocial adaptation of patients with acquired facial trauma. It is also important to routinely ask patients how they are cop-ing with the changes that have occurred since the change in

their facial appearance and have an idea about the family's view of this adaptation process.

The single most important step that plastic surgeons can make to ensure that their patients attain the highest level of psychosocial rehabilitation is to develop a consistent and trusting

relationship with a mental health professional whom one can confidently and enthusiastically refer your patients.

Footnotes

Source of Support: Nil

Conflict of Interest: None declared

Article information

Indian J Plast Surg. 2010 Jul-Dec; 43(2): 200-205.

doi: 10.4103/0970-0358.73452

Avinash De Sousa

Department of Psychiatry, Lokmanya Tilak Municipal Medical College and General Hospital, Mumbai, India

Address for correspondence: Dr. Avinash De Sousa, Carmel, 18 St Francis Avenue, Off SV Road, Santacruz (West), Mumbai 400 054, Maharashtra, India. E-mail: avinashdes999@yahoo.co.uk

Copyright © Indian Journal of Plastic Surgery

This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

This article has been cited by other articles in PMC.

Articles from Indian Journal of Plastic Surgery: Official Publication of the Association of Plastic Surgeons of India are provided here courtesy of Medknow Publications

REFERENCES

- 1. Cunningham SJ. The psychology of facial appearance. Dent Update. 1999;26:438–43. [PubMed]
- 2. Shetty V, Glynn S, Brown KE. Psychological sequelae and correlates of orofacial injury. Dent Clin North Am. 2003;47:141–57. [PubMed]
- 3. De Sousa A. Psychological issues in oral and maxillofacial reconstructive surgery. Br J Oral Maxillofac Surg. 2008;46:661–4. [PubMed]
- 4. Frodel JL., Jr Dealing with the difficult trauma and reconstructive surgery patient. Facial Plast Surg Clin North Am. 2008;16:225-31. [PubMed]
- 5. Bisson JI, Shepherd JP, Dhutia M. Psychological sequelae of facial trauma. J Trauma. 1997;43:496–500. [PubMed]
- 6. Bisson JI. The psychological sequelae of facial trauma. J Trauma. 1997;43:496–500. [PubMed]
- 7. Levine E, Degutis L, Pruzinsky T, Shin J, Persing JA. Quality of life and facial trauma: Psychological and body image effects. Ann Plast Surg. 2005;54:502–10. [PubMed]
- 8. Cuijpers P, Smit F. Subthreshold depression as a risk factor for major depressive disorder: A review of prospective studies. Acta Psychiatr Scand. 2004;109:325–31. [PubMed]
- 9. Meningaud JP, Benadiba L, Servant JM, Bertrand JC, Pelicier Y. Depression, anxiety and quality of life: Outcome 9 months after facial cosmetic surgery. J Craniomaxillofac Surg. 2003;31:46–50. [PubMed]
- 10. Enqvist B, Von konow OL, Bystedt OH. Stress reduction, preoperative hypnosis and perioperative suggestion in maxillofacial surgery: Somatic responses and recovery. Stress Med. 1995;11:229–33.
- 11. McGrouther DA. Facial disfigurement. BMJ. 1997;314:991–2. [PMC free article] [PubMed]
- 12. Newell R, Marks I. Phobic nature of social difficulty in facially disfigured people. Br J Psychiatry. 2000;176:177-81. [PubMed]
- 13. Le BT, Dierks EJ, Ueeck BA, Homer LD, Potter BF. Maxillofacial injuries associated with domestic violence. J Oral Maxillofac Surg. 2001;59:1277–83. [PubMed]
- 14. Van Swearingen J. Facial rehabilitation: A neuromuscular reeducation and patient centered approach. Facial Plast Surg. 2008;24:250–9. [PubMed]
- 15. Shaikh ZS, Worall SF. Epidemiology of facial trauma in a sample of patients aged 1-18 years. Injury. 2002;33:669-71. [PubMed]

- 16. Thompson A, Kent G. Adjusting to disfigurement: The processes involved in dealing with being visibly different. Clin Psychol Rev. 2001;21:663–82. [PubMed]
- 17. Shepherd JP. Strategies for the study of the long term sequelae of oral and facial injuries. J Oral Maxillofac Surg. 1992;50:390–9. [PubMed]
- 18. Tebble NJ, Thomas DW, Price P. Anxiety and self consciousness in patients with minor facial lacerations. J Adv Nurs. 2004;47:417–26. [PubMed]
- 19. Sen P, Ross N, Rogers S. Recovering maxillofacial trauma patients: The hidden problem. J Wound Care. 2001;10:53–7. [PubMed]
- 20. Gopalkrishna G, Peek-Asa C, Kraus JF. Epidemiological features of facial injuries among motorcyclists. Ann Emerg Med. 1998;32:425–30. [PubMed]
- 21. Glynn SM, Shetty V, Elliot-Brown K, Leathers R, Belin TR, Wang J. Chronic post traumatic stress disorder after facial injury: A 1 year prospective cohort study. J Trauma. 2007;62:410–8. [PubMed]
- 22. Fabio R, Allesandro DA, Guiseppe A, Berrone S. Maxillofacial trauma and psychiatric sequelae: Post traumatic stress disorder. J Craniofac Surg. 2005;16:355–60. [PubMed]
- 23. Herman JL. Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. J Trauma Stress. 1992;5:377-91.
- 24. Hull AM. Neuroimaging findings in post traumatic stress disorder. Br J Psychiatry. 2002;181:102–10. [PubMed]
- 25. Crowley KE. Aesthetic issues and anxiety management in female oral and maxillofacial surgery patients. Oral Maxillofac Surg Clin North Am. 2007;19:141–52. [PubMed]
- 26. Thomas CS, Goldberg DP. Appearance, body image and distress in facial dysmorphophobia. Acta Psychiatr Scand. 1995;92:231–6. [PubMed]
- 27. Newell R. Psychological difficulties among plastic surgery ex-patients following surgery to the face. Br J Plast Surg. 2000;53:386–92. [PubMed]
- 28. Furness G, Garrud P, Faulder A, Swift J. Coming to terms: A grounded theory of adaptation to facial surgery in adulthood. J Health Psychol. 2006;11:453–66. [PubMed]
- 29. Pruzinsky T. Body Image: A Handbook of Theory, Research and Clinical Practice. New York: Guilford Press; 2002.
- 30. Islam S, Ahmed M, Walton GM, Dinan TG. The assosciation between depression and anxiety disorders following facial trauma: A comparative study. Injury. 2010;41:92–6. [PubMed]
- 31. Auerbach SM, Laskin DM, Kiesler DJ, Wilson M, Rajab B, Campbell TA. Psychological factors associated with a response to maxillofacial injury and its treatment. J Oral Maxillofac Surg. 2008;66:755–61. [PubMed]
- 32. Clarke A. Psychosocial aspects of facial disfigurement: Problems, management and the role of a lay led organization. Psychol Health Med. 1999;4:127–42.
- 33. Rankin M, Borah GL. Anxiety disorders in plastic surgery. Plast Reconstr Surg. 1997;100:535–42. [PubMed]
- 34. Koster ME, Bergsma J. Problems and coping behavior of facial cancer patients. Soc Sci Med. 1990;30:569–78. [PubMed]
- 35. Macgregor FC. Facial disfigurement: Problems and management of social interaction and implications for mental health. Aesthetic Plast Surg. 1990;14:249–57. [PubMed]
- 36. Sainsbury DC. Body image and facial burns. Adv Skin Wound Care. 2009;22:39–44. [PubMed]
- 37. Carr A, Harris D, James C. The derriford appearance scale: A new scale to measure individual responses to living with problems of appearance. Br J Health Psychol. 2000;5:201–15.
- 38. Rankin M, Borah GL. Perceived functional impact of impaired facial appearance. Plast Reconstr Surg. 2003;14:2140–6. [PubMed]

- 39. Arcan SC. Overview of facial cosmetic surgery. J Calif Dent Assoc. 2004;32:849-53. [PubMed]
- 40. Turner SR, Rumsey N, Sandy JR. Psychological aspects of cleft lip and cleft palate. Eur J Orthod. 1998;20:407–15. [PubMed]
- 41. Brill SE, Clarke A, Veale DM, Butler PE. Psychological management and body image issues in facial transplantation. Body Image. 2006;3:1–15. [PubMed]
- 42. Linley PA, Joseph S. Positive change following trauma and adversity: A review. J Trauma Stress. 2004;17:11–21. [PubMed]
- 43. Bonnano GA. Resilience in the face of potential trauma. Curr Dir Psychol Sci. 2005;14:135-8.
- 44. Eiserman W. Unique outcomes and positive contributions associated with facial difference: Expanding research and practice. Cleft Palate Craniofac J. 2000;38:236–44. [PubMed]
- 45. Burland J. Family to family: A trauma and recovery model of family education. New Dir Ment Health Serv. 1998;77:33-41. [PubMed]
- 46. Chemtob CM. Post traumatic stress disorder, trauma and culture. Int Rev Psychiatry. 1996;2:257-96.
- 47. De Maio M. The minimal approach: An innovation in facial cosmetic procedures. Aesthetic Plast Surg. 2004;28:295–300. [PubMed]
- 48. Bellucci CC, Kapp-Simon KA. Psychological considerations in orthognathic surgery. Clin Plast Surg. 2007;34:11-6. [PubMed]
- 49. Rumsey N, Harcourt D. Body image and disfigurement: issues and interventions. Body Image. 2004;1:83-97. [PubMed]
- 50. Haas CF, Champion A, Secor D. Motivational factors for seeking cosmetic surgery: A synthesis of literature. Plast Surg Nurs. 2008;28:177–82. [PubMed]
- 51. Kreiger LM, Lee GK. The economics of plastic surgery practices: Trends in income, procedure mix and volume. Plast Reconstr Surg. 2004;114:192–9. [PubMed]
- 52. Maurin JT, Boyd CB. Burden if mental illness on the family: A review. Adv Psychol Res. 1990;4:99–107. [PubMed]
- 53. Brown GW. Life events, psychiatric disorder and physical illness. J Psychosom Res. 1981;25:461–73. [PubMed]
- 54. Khouzam HR, Kissmeyer P. Antidepressant treatment, post traumatic stress disorder, survivor guilt and spiritual awakening. J Trauma Stress. 1997;10:691–6. [PubMed]
- 55. Brewin CR, Robson MJ, Shapiro DA. Social and psychological determinants of recovery from industrial injuries. Injury. 1983;14:451–5. [PubMed]
- 56. Bellamy R. Compensation neurosis: Financial reward for illness as a nocebo. Clin Orthop Relat Res. 1997;336:94–106. [PubMed]
- 57. Sarwer DB, Crerand CE. Psychological issues in patient outcomes. Facial Plast Surg. 2002;18:125–34. [PubMed]