



Profile of Patients With Soft Tissue Injuries of Face

KEYWORDS

Facial injuries, road traffic accidents

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ABSTRACT *Objective: To study the profile of patients with soft tissue injuries of face. Material and Method: This is a prospective study of 80 patients who presented to the OPD/Emergency with a primary diagnosis of facial injury. Result: The mean age of patients presenting with facial injury was 30.08 years, male female ratio was 5.6:1 Road traffic accident followed by fall from height were the common causes of facial injuries. Conclusion: Provision of good roads and strict observance of traffic rules can significantly lower the incidence of facial injuries.*

Introduction: Soft tissue injuries to face have been documented in literature and even depicted in sculptures, reflecting image of the society (1). Injuries to no other area of the body illicit more of an emotional response than those to the face. Patients fear permanent scarring and facial disfigurement (2). The human face constitutes the first contact point in several human interactions, thus injuries and/or mutilation of the facial structures may have a disastrous influence on the affected person (3). Soft tissue injuries arise from myriad etiologies, from knife or gunshot wounds to animal injuries, and from assaults to motor vehicle accidents (4). What so ever is the type of injury, whether isolated or in combination with other injuries, soft tissue injuries are among the most common traumatic craniofacial injuries encountered by emergency department personnel and Plastic Surgeons. These injuries account for nearly 10% of all emergency department visits. Although rarely life-threatening, the treatment of these injuries can be complex and may have significant impact on the patient's facial function and aesthetics (5).

Material and Method: This study was conducted in the Department of Surgery at Himalayan Institute of Medical Sciences, Swami Ram Nagar, Dehradun over a period of 12 months after taking an informed and written consent from the patients/attendants. 80 patients with soft tissue injuries of face were included in the study relevant points in history and physical examination were recorded using the investigator designed working proforma. The data thus collected was subjected to descriptive statistical analysis

Result:

Table 1 shows that Overall mean age of the patients in our study was 30.08 years. Out of total 80 patients included youngest was of 3 years and oldest being of 88 years. The maximum incidence of facial injuries was found in 19-40 years of age 44 (55%) followed by 17 (21.25%) in 41-60 years of age. The lowest incidence was observed in the age group of more than 60 years i.e. 5 (6.25%). And 14 (17.5%) cases included in this study were between 1-18 years of age

Table 2 shows that the number of male and female patients were 68 (85%) and 12 (15%) respectively with a male to female ratio of 5.6:1

Table 3 shows that maximum no. of patients 58(72.5%) suffered facial trauma following involvement in road traffic accidents, followed by fall from height 12(15%), animal bite 5(6.25%), assault 4(5%) and only 1(1.25%) patient had sport related injury.

Table 4 depicts Out of 58 road traffic accidents, two wheelers were involved in maximum number of cases, 31 (53.44%), followed by 16 cases(27.5%) in which pedestrians got injured, 14 (27.13%) cases in which four wheelers were involved, 3(5.17%) bicycle riders were involved and the number of heavy vehicle drivers were the same i.e. 3(5.17%).

Table 1 : Age wise distribution of subjects (n=80)

Age group	No. of cases	Percentage
1 - 18 yrs	14	17.5%
19 - 40 yrs	44	55%
41-60 yrs	17	21.25%
>60 yrs	5	6.25%
Total	80	100%

Table 2 : Sex wise distribution of subjects (n=80)

Sex	No of cases	Percentage
Males	68	85%
Females	12	15%
Total	80	100%

Table 3: Distribution according to mode of injury (n=80)

Mode of injury	Number of Patients	Percentage
Fall from height	12	15%
Assault	4	5%
Animal bite	5	6.25%
Sports	1	1.25%
Accidents	58	72.5%
Total	80	100 %

Table 4: Table depicting type of vehicle involved in accident

Type of vehicle	No. of Patients	Percentage
Pedestrian	16	27.5
Bicycle	3	5.17
Two-wheeler	31	53.44
Four-wheeler	14	27.13
Heavy-vehicles	3	5.17

Discussion:

The present study was done to analyse soft tissue injuries of face and various epidemiologic factors, including the patient's demographic profile & etiology of injury. The pattern of age distribution in facial injuries demonstrated that people of all ages were affected; the peak incidence was, however, observed in the age group of 19 - 40 years i.e. 55%, followed by 17 (21.25%) in 41-60 years of age. The lowest incidence was observed in the age group of more than 60 years i.e. 5 (6.25%). And 14 (17.5%) cases included in this study were between 1-18 years of age. Overall mean age of the patients in our study was 31.07 years. This finding is in accordance with a number of previous studies in India as well as other parts of the world. Individuals in the extremes of life were found to be least affected. The mean age of patients admitted with maxillofacial trauma was 23.2 years as shown by Semra Haciker IM Karsidag et al in his study on facial injuries(6). Jonathan P. Shepherd et. al. also did a study on facial injuries in which young adult males were most commonly involved. The third and fourth decade is perhaps the most active period of life in which people tend to remain outdoors in search of their livelihood and are thus more vulnerable to vehicular accidents, falls, and assault-related injuries (7).

The gender distribution revealed a male preponderance in all the age groups as has been reported in other studies. The male-female ratio in our sample is 5.6:1, while the male-female ratio in a similar study conducted by Semra Haciker IM Karsidag et al is 4:1,(6) however, higher than what has been reported by Ugboko et al. (8) and other authors. This is most likely due to the fact that in the lower socioeconomic group, which constitutes the bulk of the patients reporting to this particular hospital, men are often the primary bread winners of the family and tend to remain outdoors for a large period of time, thus making them susceptible to trauma in general and maxillofacial trauma in particular. Also, females drive less frequently and are thus less likely to be involved in vehicular accidents, they are also less vulnerable to sport-related injuries and to falls and violence related to alcohol consumption.

In our study maximum number of patients 58(72.5%) suffered facial trauma following involvement in road traffic accidents, followed by fall from height 12(15%), animal bite 5(6.25%), assaults 4(5%) and sports related injury was present in only 1(1.25%) patient. Similar study conducted by BR Chandra Shekar et al has shown that RTAs were the most common cause of facial injuries i.e. (61.3%) (9) a contradictory study done by Rama Jayaraj et al showed that assault was the most common mode of injury after alcohol intoxication (10). Fall from height was the second most common cause of maxillofacial trauma in our study, found in 15% cases. This is similar to the study by BR Chandra Shekar et al who reported 16.2% incidence of facial injuries due to fall (9).

Two wheelers were responsible for the majority of road traffic accidents as shown in the study conducted by Rishi Bali (66.2% of road crashes) (11). The present study also shows similar results in which out of 58 road traffic accidents, two wheelers were involved in maximum number of cases 31 (53.44%), followed by 16 cases (27.5%) in which pedestrians were involved, 14 (27.13%) cases in which four wheelers were involved, while bicycle and heavy vehicle are sharing same no. of cases 3(5.17%). The two wheelers in comparison with the cars are unstable and provide little protection to their riders in accidents. This may be the possible explanation for the increasing frequency of RTAs involving the two wheelers.

Summary:

This study summarizes that the overall mean age of the patients having soft tissue injury of face according was 30.08 year with a male to female ratio of 5.6:1.

Road traffic accidents followed by fall from height are the major causes of facial injuries.

Two wheelers were involved in maximum number of cases (53.44%) followed by 16 cases (27.5%) in which pedestrians got injured.

Conclusion:

These finding should alert the authorities, particularly the government and the Road Safety Commission to the need for the provision of good roads and strict enforcement of existing traffic laws, so as to bring down the incidence of facial injuries.

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