



## Correlation of Alcohol Intoxication With Injuries of Face

### KEYWORDS

Alcohol intoxication, facial injuries

**Dr.Utsav Gaur**

P G Hostel, SRHU campus, Swami Ram Nagar, Doiwala, Dehradun

**Professor Dr. Manu Rajan**

Professor Dr. Manu Rajan B 8/2 SRHU Campus, Swami Ram Nagar, Doiwala, Dehradun

**Professor Dr. Sanjay Divedi**

B 3/1 SRHU Campus, Swami Ram Nagar, Doiwala, Dehradun

**ABSTRACT** *Objective: To find the correlation of alcohol intoxication and facial injuries. Material & Methods: This is a prospective study of 80 patients who presented to the OPD/Emergency with a primary diagnosis of facial injury. Result: 37(46.25%) out of the total 80 cases of facial injuries were under the influence of alcohol at the time of injury. Conclusion: Strict enforcement of drink driving legislation can significantly bring down the number of facial injuries.*

**Introduction:** Facial injuries remain serious clinical problems because of the specificity of this anatomical region, this is the area where the important organs are located and where the digestive and respiratory systems start, that is why injuries to this region are reason of serious dysfunction. Due to an anatomical proximity, together with maxillofacial injuries, damages to the central nervous system often occur. It must be emphasized that facial traumas are often the reason of esthetic disturbances. Thus, the psychological aspect of injuries to maxillofacial region are of great importance. That is why special attention is paid to etiologic factors and trauma mechanisms to successfully prevent these injuries (1).

Alcohol consumption is considered a part of the life style of the present generation and the proportion of youth with this habit is increasing with the time. This study aims to study the correlation between Alcohol intoxication & facial injuries

**Materials and methods:** 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 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.

### Results:

Table 1 shows that in our study 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 2 shows that the total number of cases who were intoxicated during the event were 37(46.25%) out of the total 80 cases with a ratio of 0.86:1.

Table 3 shows that the number of injuries on weekdays and weekends were 51 (63.75%) and 29(36.25%) respectively with a weekdays to weekends ratio of 1.75:1.

Table 4 depicts that maximum number of patients 36 (45%)

got injured between 12pm to 8pm while 19(23.75%) and 13(16.25%) patients got injured between 8pm to 12pm and 8am to 12pm respectively. 12(15%) patients incurred injury between 12am to 8am.

Table 5 illustrates that out of 37 who cases who were found intoxicated 18(48.64%) cases had consumed alcohol on weekends and 19(51.35%) cases consumed alcohol on other weekdays.

**Table 1: 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 2: Distribution of patients according to alcohol intoxication**

Alcohol Intoxication	No. of cases	Percentage
Present	37	46.25
Absent	43	53.75

**Table 3: Weekdays wise distribution of subjects (n=80)**

	Number of Patients	Percentage
Weekends	29	36.25%
Weekdays	51	63.75%
Total	80	100 %

**Table 4: Time of incidence (n=80)**

Time	Number of Patients	Percentage
12am to 8am	12	15%
8am to 12pm	13	16.25%
12pm to 8pm	36	45%
8pm to 12am	19	23.75%
Total	80	100 %

**Table 5: Relation between alcohol intoxication and weekdays (n=80)**

	No. of cases	Percentage
Weekend	18	48.64%
Weekdays	19	51.35%
Total	37	100%

Discussion: 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%) (2). A study done by Rama Jayaraj et al showed that assault was the most common mode of injury after alcohol intoxication (3).

The alcohol consumption is considered a part of the life style of the present generation and the proportion of youth with this habit is increasing with the time. In our study a total number of cases who were intoxicated during the injury were 37(46.25%) out of the total 80 cases with a ratio of 0.86:1. It is accordance with the study done by Ludmil Gagov, who found that out of the total 212 patients for which data was available, 109 (51.41%) patients had alcohol related facial injuries. Another study showing similar results was conducted by BR Chandra Shekar showing 58.8% of the total patients with maxillofacial injuries were under alcoholic influence at the time of injury. Alcohol impairs driving ability and increases the risk of an accident as well as its consequences. Alcoholics become more violent and this may be reason for higher incidence of fight and assault related maxillofacial injuries among male alcoholics as was found in the study by Lee et al. (4).

In our study we observed that the number of injuries on weekdays and weekends were 51 (63.75%) and 29(36.25%) respectively with a weekdays to weekends ratio of 1.75:1, this shows that the incidence of injuries increases on weekends compared to other 5 days of week. This finding is in accordance with a study conducted by Pranav Kapoor et. al. which also shows a high incidence of injuries of facial injuries i.e. 29 (36.25%) on Saturdays (44.7%) followed by Sundays (28.3%) (5).

In our study maximum number of patients 36 (45%) got injured between 12pm to 8pm while 19(23.75%) and 13(16.25%) patients got injured between 8pm to 12pm and 8am to 12pm respectively. 12(15%) patients got injured between 12am to 8am this finding is in accordance with a study conducted by Pranav Kapoor et al in the year 2012, in this study the greatest incidence of maxillofacial trauma (38.0%) was observed in the evening hours between 6 pm and 12 am. Other study conducted by Veerasha et al. (6), have shown similar result and may be attributed to a tendency to consume alcohol in the evenings. The proportion of cases reporting between 2 am and 6 am and between 12 pm and 6 pm was similar, with the least number of cases reporting in the morning (6 am-12 pm) (5).

In this study it is also shown that out of 37 who cases who were found intoxicated 18(48.64%) cases have consumed alcohol on Saturdays and Sundays i.e. in just 2 days while 19(51.35%) cases consumed alcohol on other 5 days of the week. A similar increase in facial injuries on weekends

has been reported by Shephard et al. (7), and also by Gilt-horpe et al. (8), and is believed to be associated with increased alcohol consumption and late night partying on these days.

### Conclusion:

This study shows that very high percentage of road traffic accidents occur after alcohol intoxication, especially on weekends and recommends strict enforcement of drink driving legislation so that the incidence of these injuries can be brought down.

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