

# A Study of Outcome of cranio-maxillofacial soft-tissue injuries at tertiary care health Centre

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## Abstract

**Introduction:** Soft-tissue injuries of the cranio-maxillofacial region still remain one of the common disease encountered in the casualty department of every health-care facility. **Aims and Objectives:** To Study Outcome of Maxilo-facial soft-tissue injuries at tertiary care health Centre. **Methodology:** This was a Cross-sectional study carried out at the Department of Dentistry of Government Hospital of Tertiary Health care Centre during the period from June 2007 to June 2014 in 7 yrs. Period in all the patients Reported to Government Hospital for the injuries with the various reasons. The patients of Hard tissues except (Dento-alveolar) and head injury, were excluded from the study. Total 126 patients were reported during the time period. The outcome of these patients were noted. **Result:** In our study we have seen that The majority of the patients were form the age groups (Yrs.) of 30-40- were 45 (35.71%); followed by 20-30 were 35 (27.77%); 40-50 were 19 (15.07%); 50-60 were 15(11.90%); >60Yrs were- 12 (9.52%) respectively. The majority of the patients were Male- 95(75.30%) followed by Female-31 (24.70%)The most common cause was RTA- 62 (49.20%) followed by Assault 21 (16.66%); Fall -41(32.53%); Animal assault injuries -2 (1.58%). The most common pattern of injury was Soft tissue only was 55 (43.65%) followed by Soft tissue + Dentoalveolar was 38(30.15%); Soft tissue + Dentoalveolar + Tongue was 13 (10.31%); Soft tissue + Tongue only was 20 (15.87%). The majority of the patients were improved i.e. 120 (95.23%) followed by Referred to Higher Centre due to neurological problems were 6 (4.77%). **Conclusion:** The most common cause was RTA followed by Assault, Fall, Animal assault injury The most common pattern of injury was Soft tissue only was followed by,Soft tissue plus Dentoalveolar and in outcome the majority of the patients were improved and remaining referred to higher Centre for the neurological problems.

**Key Words:** Cranio-maxillofacial soft-tissue injuries, RTA(Road Traffic Accidents).

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## INTRODUCTION

Soft-tissue injuries of the cranio-maxillofacial region still remain one of the common disease encountered in the casualty department of every health-care facility. Various types of injuries occur depending on the etiology and mechanism of injuries.<sup>1</sup> Causal factors of these injuries

include road traffic accidents, interpersonal violence/homicidal injuries, domestic accidents and other work/occupational related injuries, sports related injuries, animal Assault injuries<sup>1,2,3,4,5,6,7</sup> However, the prevalence of the causes varies in different places and countries and also in prevailing circumstances. Soft-tissue injury can affect the skin, subcutaneous tissue, muscle, fat, nerves, blood vessels, salivary glands, and eyes.<sup>1</sup>

## METHODOLOGY

This was a Cross-sectional study carried out at the Department of Dentistry of Government Hospital of Tertiary Health care Centre during the period from June 2007 to June 2015 in 7 yrs. Period in all the patients Reported to Government Hospital for the injuries with the various reasons. The patients of head injuries were excluded from the study. Total 126 patients were reported during the time period. The detailed clinical history and

Dental and Oral and General examination was done. The cause of injury, pattern of facial injury, pattern of fracture of facial bone were noted. All the patients managed with all possible medical care and Dental treatment as per the injury the necessary minor surgeries were carried out. The outcome of these patients were noted.

## RESULT

**Table 1:** Age wise Distribution of the Patients

Age	No.	Percentage
20-30	35	27.77%
30-40	45	35.71%
40-50	19	15.07%
50-60	15	11.90%
>60	12	9.52%
<b>Total</b>	<b>126</b>	<b>100.00%</b>

The majority of the patients were from the age groups (Yrs.) of 30-40- were 45 (35.71%); followed by 20-30 were 35 (27.77%); 40-50 were 19 (15.07%); 50-60 were 15 (11.90%); >60Yrs were- 12 (9.52%) respectively.

**Table 2:** Gender-wise distribution of the Patients

Sex	No.	Percentage (%)
Male	95	75.30%
Female	31	24.70%
<b>Total</b>	<b>126</b>	<b>100.00%</b>

The majority of the patients were Male- 95(75.30%) followed by Female-31 (24.70%)

**Table 3:** Distribution of the Patients as per the Cause of Injuries

Causes	No.	Percentage(%)
RTA	62	49.20%
Assault	21	16.66%
Fall	41	32.53%
Animal assault injuries	2	1.58%
<b>Total</b>	<b>126</b>	<b>100.00%</b>

The most common cause was RTA- 62 (49.20%) followed by Assault 21 (16.66%); Fall -41(32.53%); Animal assault injuries -2 (1.58%).

**Table 4:** Distribution of Patients as per the Pattern of maxillofacial injury

Pattern of injury	No.	Percentages (%)
Soft tissue only	55	43.65%
Soft tissue + Dentoalveolar	38	30.15%
Soft tissue + Dentoalveolar + Tongue	13	10.31%
Soft tissue + Tongue only	20	15.87%
<b>Total</b>	<b>126</b>	<b>100.00%</b>

The most common pattern of injury was Soft tissue only was 55 (43.65%) followed by Soft tissue + Dentoalveolar was 38(30.15%) ;Soft tissue + Dentoalveolar + Tongue was 13 (10.31%) ; Soft tissue + Tongue only was 20 (15.87%).

**Table 5:** Distribution of the Patients as per the Outcome

Outcome	No.	Percentage (%)
Improved	120	95.23%
Referred to Higher Centre due to neurological problems	6	4.77%
<b>Total</b>	<b>126</b>	<b>100.00%</b>

The majority of the patients were improved i.e.120 (95.23%) followed by Referred to Higher Centre due to neurological problems were 6 (4.77%).

## DISCUSSION

A large number of studies have been done on the etiology of maxillofacial injuries.<sup>12</sup> Present study has shown that maxillofacial injuries are more common in third decade of life this is comparable with these studies<sup>5,6,7,8,9,10,11</sup>; This may be due to the fact that these studies did not include the soft tissues and dentoalveolar injuries in children.

In our study we have seen that The majority of the patients were from the age groups (Yrs.) of 30-40- were 45 (35.71%); followed by 20-30 were 35 (27.77%); 40-50 were 19 (15.07%); 50-60 were 15(11.90%); >60Yrs were- 12 (9.52%) respectively. The majority of the patients were Male- 95(75.30%) followed by Female-31 (24.70%)The most common cause was RTA- 62 (49.20%) followed by Assault 21 (16.66%); Fall - 41(32.53%); Animal assault injuries -2 (1.58%). The most common pattern of injury was Soft tissue only was 55 (43.65%) followed by Soft tissue + Dentoalveolar was 38(30.15%); Soft tissue + Dentoalveolar + Tongue was 13 (10.31%);Soft tissue + Tongueonly was20 (15.87%). The majority of the patients were improved i.e. 120 (95.23%) followed by Referred to Higher Centre due to neurological problems were 6 (4.77%). These findings are confirmatory with Akinbami Babatunde Olayemiet *al*<sup>13</sup>.

## CONCLUSION

The most common cause was RTA followed by Assault, Fall, Animal assault injury The most common pattern of injury was Soft tissue only was followedby, Soft tissue plus Dentoalveolar and in outcome the majority of the patients were improved and remaining referred to higher Centre for the neurological problems.

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