

EPIDEMIOLOGICAL PROFILE OF FACIAL TRAUMA TREATED AT FATHER MULLER HOSPITAL, THUMBAYAsher George Joseph¹, Caren D'Souza², Leo F. Tauro³, A. Kiran. Shetty⁴**HOW TO CITE THIS ARTICLE:**

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ABSTRACT: This is a study on the epidemiological profile of facial trauma in patients who visited Father Muller Hospital, Thumbay over a period of 16 months from May 2013 to September 2014. It is a descriptive study. **MATERIALS AND METHODS:** All patients with facial trauma who visited Father Muller Hospital, Thumbay during this specified time period were included in this study. Their records were analyzed retrospectively and the results are expressed in percentage and proportion. **RESULTS:** 75% of the subjects were male and 25% were female. This ratio of males to females, 3:1, is similar to previous reported ratios of 3:1 to 5.4:1.¹⁻³ Majority of the patients belong to the age group between 20-40 years (56.6%). Results of studies done previously are consistent with this finding.³⁻⁶ In this study, most of the injuries are attributed to road traffic accidents (RTA) (47.1%) which is similar to the findings of other researches.^{7,8} Falls were responsible for 42.6% of the cases and assault was responsible for 7.4% of the facial injuries. Lacerations of less than 3 cm were the most common type of injuries noted in all areas of the face. As far as the location is concerned, 47.8% of the injuries were at Bantwal, 23.5% at BC road and 19.9% at Thumbe. It was noted that 11 patients were under the influence of alcohol (8.1%) and all 11 were victims of RTA. All the injuries belonged to the minor severity category. **CONCLUSION:** Hence, it can be concluded that most of the patients who sustained facial trauma were men, majority of the subjects were between the age group of 20-40 years and the most common etiological factor noted was road traffic accidents. All the injuries recorded were minor in severity. Future studies on this topic should focus on prevention of injuries in this age group and stringent measures to curtail the increasing incidence of road traffic accidents should be implemented.

KEYWORDS: FACIAL TRAUMA, RETROSPECTIVE STUDY.

INTRODUCTION: Trauma to the face has a deleterious influence on the affected person.³ It has been reported that traffic accidents and falls are the most common causes of facial trauma.^{3,9-12} However, the incidence of blunt assault is on the rise¹³⁻¹⁵ and it has reached epidemic proportions. The physiology of injury, repair, and demography of facial trauma have been studied, however the associations between the epidemiology, incidence, and outcome are yet to be proven.¹⁶

This study is a baseline study which is designed to investigate the epidemiology of facial injuries in patients who visited Father Muller hospital, Thumbay during the time period of May 2013-September 2014. The results obtained from this research will provide a better understanding of the patterns of facial injuries occurring in this region which is essential for future researchers to help plan the prevention and management of the same.

MATERIALS AND METHODS: All patients with facial trauma who visited Father Muller Hospital, Thumbay between May 2013- September 2014 were included in this study. Their records were

ORIGINAL ARTICLE

analyzed retrospectively. The data obtained was categorized according to the age, gender, location of trauma and site of injury on the face. A special note was made if the patient was under the influence of alcohol. The injury severity was classified according to Abbreviated Injury Score.¹ The study is a descriptive study and the results have been mentioned in percentage and proportion.

RESULTS:

DEMOGRAPHIC DETAILS: 29.4% of patients belonged to the age group of 30-40 years. 27.2% of the patients belonged to the age group of 20-30 years. 11% of the patients were in the age group of 50-60 years. 10.3% patients were in the age group of 40-50 years. 6.6% of the patients belonged to the age group of 60-70 years. 11.8% of the cases were less than 20 years. Out of the 136 patients, 34 (25%) were females and 102 (75%) were males. 47.8% of the injuries were at Bantwal, 23.5% at BC road and 19.9% at Thumbay.

SEX					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	F	34	25.0	25.0	25.0
	M	102	75.0	75.0	100.0
	Total	136	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-10	8	5.9	5.9	5.9
	10-20	8	5.9	5.9	11.8
	20-30	37	27.2	27.2	39.0
	30-40	40	29.4	29.4	68.4
	40-50	14	10.3	10.3	78.7
	50-60	15	11.0	11.0	89.7
	60-70	9	6.6	6.6	96.3
	70-80	4	2.9	2.9	99.3
	80-90	1	.7	.7	100.0
	Total	136	100.0	100.0	

ETIOLOGY: Majority of the injuries are attributed to RTA (47.1%), followed by fall (42.6%). Assault was responsible for 7.4% of the facial injuries. Sickle injury, electric shock injury and others contributed for 2.8% of the cases.

ETIOLOGY					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Accidental injury by sickle	1	.7	.7	.7
	Assault	10	7.4	7.4	8.1
	Coconut falling on head	1	.7	.7	8.8
	Electric shock	1	.7	.7	9.6

ORIGINAL ARTICLE

	Fall	58	42.6	42.6	52.2
	RTA	64	47.1	47.1	99.3
	Window falling on head	1	.7	.7	100.0
	Total	136	100.0	100.0	

TYPE OF INJURY: Most of the injuries on the forehead and chin were lacerations less than 3 cm (51.8%). 28.9% injuries were lacerations between 3-6 cm. 4.8% were hematomas, 10.8% were abrasions. Other injuries contributed to 3.6% of the injuries in this area of the face. On the eye and per ocular region, 69.2% of the injuries were lacerations less than 3 cm. 15.4% of the injuries were lacerations of 3-6cm. 11.5% cases were hematomas. There was one case of avulsed iris. There were 75% cases of nose bleeds. 12.5% cases of laceration less than 3cm and 12.5% cases were abrasions on the nose. On the cheek and TMJ, Lacerations less than 3 cm were found in 48.3% cases followed by abrasions in 44.8% cases. 6.9% of injuries were lacerations 3-6cm. There were 14 patients with injuries to the lips. All of them had lacerations less than 3cm (10.3%). 9 patients had injuries to the ear. 8 of them had lacerations less than 3 cm (88.9%) and 1 patient had an abrasion (11.1%). 23 patients had multiple injuries to the face (23%).

OPEN WOUND ON FOREHEAD AND CHIN					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Laceration<3cm	43	31.6	51.8	51.8
	Laceration>3cm	24	17.6	28.9	80.7
	Hematoma	4	2.9	4.8	85.5
	Abrasion	9	6.6	10.8	96.4
	Others	3	2.2	3.6	100.0
	Total	83	61.0	100.0	
Missing	System	53	39.0		
Total		136	100.0		

EYELID AND PEROCULAR					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	18	13.2	69.2	69.2
	2	4	2.9	15.4	84.6
	3	3	2.2	11.5	96.2
	Others	1	.7	3.8	100.0
	Total	26	19.1	100.0	
Missing	System	110	80.9		
Total		136	100.0		

ORIGINAL ARTICLE

NOSE					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1	.7	12.5	12.5
	4	1	.7	12.5	25.0
	5	6	4.4	75.0	100.0
	Total	8	5.9	100.0	
Missing	System	128	94.1		
Total		136	100.0		

CHEEK AND TMJ					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	10.3	48.3	48.3
	2	2	1.5	6.9	55.2
	4	13	9.6	44.8	100.0
	Total	29	21.3	100.0	
Missing	System	107	78.7		
Total		136	100.0		

LIP AND ORAL CAVITY					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	14	10.3	100.0	100.0
Missing	System	122	89.7		
Total		136	100.0		

EAR					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	5.9	88.9	88.9
	4	1	.7	11.1	100.0
	Total	9	6.6	100.0	
Missing	System	127	93.4		
Total		136	100.0		

MULTIPLE INJURIES					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		113	83.1	83.1	83.1
	yes	23	16.9	16.9	100.0
	Total	136	100.0	100.0	

ORIGINAL ARTICLE

SEVERITY OF INJURY: All the injuries belonged to the minor severity category.

AIS					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	minor	136	100	100	100
	Total	136	100.0	100.0	

OTHERS: 11 patients were under the influence of alcohol (8.1%). All 11 were victims of RTA.

ALCOHOL					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		125	91.9	91.9	91.9
	yes	11	8.1	8.1	100.0
	Total	136	100.0	100.0	

DISCUSSION: 75% of the subjects were male and 25% were female. This ratio of males to females, 3:1, is similar to previous reported ratios of 3:1 to 5.4:1.^{1,2,3} Majority of the patients belong to the age group between 20-40 years (56.6%). Results of studies done previously are consistent with this finding.^{4,5,6,3} In this study, most of the injuries are attributed to road traffic accidents (RTA) (47.1%) which is similar to the findings of other researches.^{7,8} Falls were responsible for 42.6% of the cases and assault was responsible for 7.4% of the facial injuries. Lacerations of less than 3 cm were the most common type of injuries noted in all areas of the face. As far as the location is concerned, 47.8% of the injuries were at Bantwal, 23.5% at BC road and 19.9% at Thumbe. It was noted that 11 patients were under the influence of alcohol (8.1%) and all 11 were victims of RTA. All the injuries belonged to the minor severity category.

CONCLUSION: Hence, it can be concluded that most of the patients who sustained facial trauma were men, majority of the subjects were between the age group of 20-40 years and the most common etiological factor noted was road traffic accidents. All the injuries recorded were minor in severity. Future studies on this topic should focus on prevention of injuries in this age group and stringent measures to curtail the increasing incidence of road traffic accidents should be implemented.

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ORIGINAL ARTICLE

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