PATTERN AND CAUSES OF MAXILLOFACIAL TRAUMA AMONG SENIOR CITIZENS

1KASHIF ALI CHANNAR
2ABDUL BARI MEMON
3IRFAN AHMED SHAIKH
4SUNIL KUMAR PUNJABI
5SHUMAILA

ABSTRACT

Maxillofacial trauma is one of leading challenge in developing countries. Trauma is a growing concern in geriatric population. The objective of this study was to evaluate the pattern, causes and site of maxillofacial trauma among senior citizens seen at Liaquat University of Medical and Health Sciences, Hyderabad, Sindh. This retrospective cross sectional study was conducted from February 2015 to March 2015 Liaquat Medical University Hospital. All geriatric patients aged 60 years and above, sustaining oral and maxillofacial injuries were included in this study. Data related to age, gender, etiology, types of injuries were assessed. The etiology of injury was classified as RTA (Road Traffic Accident), assault, violence, fall and industrial accident. The types of injury were grouped as soft tissue (abrasion, laceration and contusion). Site of fractures (mandibular, maxillary, zygomatic complex and dento-alveolar) were also recorded. In this geriatric group maxillofacial trauma accounted for approximately 5.68% of injuries. There were 73% men and 27% women. The most common cause of trauma was RTA (56%) followed by fall (24%) and violence (10.6%). There was no significant association between gender and causes of trauma (p-value =0.490). Maxillofacial injury was predominant in the 60–70-year age group and there was no significant association between different age groups and causes of trauma (p-value =0.813). Frequency of soft tissue injury occurred in the form of abrasion 44%, laceration 33% and contusion 23%. Mandible was most commonly involved site (40%) followed by fracture of the zygomatic complex (28%).

Key Words: Geriatric dentistry, Maxillofacial trauma, LUMHS, Jamshoro.

INTRODUCTION

Maxillofacial trauma is one of leading challenge in developmental countries. Trauma is a growing concern in geriatric population. People over the age of 60 years increasing day by day throughout the world. According to WHO, Pakistan is among the world’s 15 countries with more than 10 million people aged 60 and above, will have 43.3 million people (15.8%) of the said age group by 2025 as compared to 11.6 million in 2012. Globally too, the number of people aged 60 or above is growing faster than any other age group, and is expected to reach 1 billion within just 10 years. It is, therefore, imperative for governments to address the needs of the growing population before they are taken by surprise. Trauma is the fifth leading cause of death in this age group. Physiologic changes with decrease in vision or hearing, changes in proprioception, decrease in muscle tone and slow reflexes can put them at risk of falling and other types of trauma. It has been shown that there was a 25% increase in admissions for trauma patients older than 65 years in the last decade and they sustained higher morbidity and mortality than younger people for the same severity of injury. The prevalence of maxillofacial trauma in children and young adults has been well documented but very few studies have focused on the geriatric Asian populations. Road Traffic Accidents (RTA), falls and assaults are the common etiology of trauma in geriatric patients, causing injuries to the head and neck area. The WHO has classified the ageing population to be those who are 65 years and older and for developing countries, the age was decreased to 60 years and older. In this country, this population is known as the senior citizens. Liaquat university hospital one of leading emergency receiving...
hospital of Sindh province Pakistan and is the main
general and tertiary hospital Hyderabad. The purpose
of this study was to determine the pattern and causes
of maxillofacial injuries among senior citizens referred
to LUMHS Jamshoro /Hyderabad. This study will help
in recommendation of possible preventive measures,
to help the policy makers evolve a better trauma care
program by focusing on the target groups and introduce
cost effective preventive measures.

METHODOLOGY

All geriatric patients aged 60 years and above
sustaining oral and maxillofacial injuries presented to
department of Oral and maxillofacial surgery Liaquat
Medical University Hospital, Jamshoro, Pakistan were
included in the study. The data was collected from
February 2015 to March 2015. Data related to age,
gender, etiology and types of injuries were assessed.
The etiology of injury was classified as RTA, assault,
violece, fall and industrial accident. The types of injury
were grouped as soft tissue (abrasion, laceration and
contusion) and bony fractures (mandibular, maxillary,
zygomatic complex and dentoalveolar). For data entry
and analysis, SPSS version 16 was used. Descriptive
statistics such as means and standard deviation (SD)
for numerical variables like age was computed and
frequency and percentages for categorical variables
like gender, cause and type of injury were calculated.
Chi square test was applied to see any significant as-
sociation. The level of significance was set at >0.05.

RESULTS

There were 1320 patients who sustained oral and
maxillofacial trauma, brought in Liaquat Medical
University Hospital from January 2012 to March 2015.
Among these, 75 patients were 60 years and older. This
shows that the trend of maxillofacial trauma in this
geriatric group accounted for approximately 5.68% of
injuries in that 2-year period. Ages ranges 60-89 years
with a mean age of 66.49 ± 7.240. There were 55 (73%)
men and 20 (27%) women. The most common cause of
trauma was Road Traffic Accidents (RTA) followed by
fall and violence. There was no significant association
between gender and causes of trauma (Table 1). Max-
illofacial injury was predominant in the 60-70-year
age groups and there was no significant association
between different age groups and causes of trauma
(P-value 0.813) (Table 2).

Soft tissue injury was the most common injury
sustained in maxillofacial trauma. This commonly
occurred in the form of abrasion 44%, laceration 33%
and contusion 23% wounds both outside and inside
the mouth (Table 3). Generally, the most common site
involvement was mandibular fractures (40%) fractures
followed by zygomatic complex (28%) and maxillary
fracture (19%) (Table 4).

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<tr>
<th>TABLE 1: RELATIONSHIP BETWEEN GENDER AND CAUSES OF TRAUMA</th>
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<tr>
<td><strong>Gender distribution</strong></td>
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<th>TABLE 2: RELATIONSHIP BETWEEN AGE GROUPS AND CAUSES OF TRAUMA</th>
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<td><strong>Age</strong></td>
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CONCLUSION

The findings of this study suggest that the most common cause of trauma was road traffic accidents (RTA) followed by fall and violence in elderly patient. Mandible was commonly involved site in fractures and there was no significant association between gender and causes of trauma.

REFERENCES


CONTRIBUTIONS BY AUTHORS

1 Kashif Ali Channar: Principal Investigator, data collected
2 Abdul Bari Memon: Data analysis and final shape
3 Irfan Ahmed Shaikh: Data entry and language correction
4 Sunil Ahmed Shaikh: Helped in discussion writing
5 Shumaila: Net browsing for searching literature and reference setting