International Journal of Medical and Health Research
ISSN: 2454-9142
Impact Factor: RJIF 5.54
www.medicalsciencejournal.com
Volume 3; Issue 12; December 2017; Page No. 51-52

Bone injuries in vehicular accidents a radiological study with special reference to Dakshina Kannada, Karnataka

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Abstract
Bone injuries resulting from road traffic accidents have been rightly termed as the invited disease of the contemporary society (Daffner, 2009). Although this is a global issue, the Dakshina Kannada District in India has experienced numerous casualties of this nature with the evolution of time (British Editorial Society of Bone and Joint Surgery, 2013). For this reason, it is necessary to review a recent study entitled Epidemiological Trends of Trauma in Tertiary Care Centre written by professors and radiologist in this region. Analyzing the 2013 research through studying its methods and results shall enable one to comprehend the current issue along with the role physicians and parliamentarians should play to tackle the rising bone injuries.

Keywords: bone injuries, radiological, accidents, physicians

Introduction
The adult human body consists of a skeleton of 206 bones that allow one walk, run, and perform endless activities (Shartava, 2011) [10]. However, bones can suffer injuries when an individual undergoes serious accidents especially while traveling (Patil, 2013) [9]. For instance, the rate of road traffic injuries in Dakshina Kannada District in India has increased in the recent years. As a result, radiologists have administered studies to gain a better understanding of the pattern of bone injuries and trauma in this region (Dsouza, Rao, Kumar, & Diaz, 2014) [4]. By analyzing a 2013 study, stating its methods, results, and findings plus discussing the efficiency of the research the rampant bone injuries in the Indian district shall be comprehended.

Literature Review
When commencing this study, the research team stated that their primary objective was to study the pattern of bone injuries in Dakshina Kannada District to understand how radiologist had assisted these traffic injuries (Dsouza, Rao, Kumar, & Diaz, 2014) [4]. Since the physicians that carried out the study are experts in their field as well as residents in this region their analysis on this matter can be trusted. Despite the fact that the findings of this study are credible, to discover the prevalence of this issue in the entire district multiple hospitals should have been assessed.

Methods
The research was conducted in the emergency department of a health facility for six months in 2013. Since it was an epidemiological study, data was collected from 1,140 patients with bone injuries (Dsouza, Rao, Kumar, & Diaz, 2014) [4]. The nature and cause of each complication were recorded and analyzed by radiologists in a Microsoft Excel document.

Results and Findings
Through studying the collected data, it was discovered that the age group of 25-44 were most affected by vehicular injuries. Interestingly, over 50% of the casualties occurred on the weekend (Dsouza, Rao, Kumar, & Diaz, 2014) [4]. The physicians also learned that patients who were given a diagnosis within an hour of the accident through radiology services such as x-rays and computed tomography were more likely to survive.

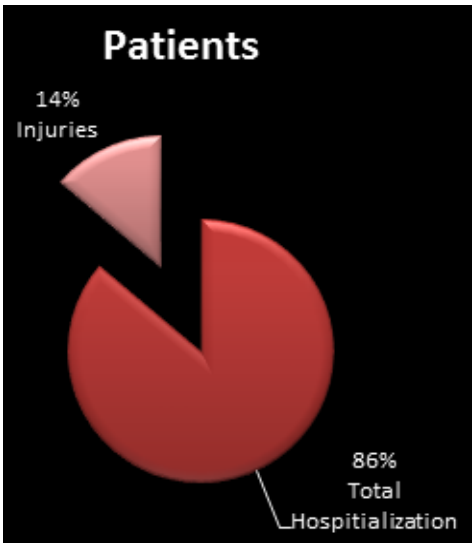

Fig 1: Total Patients Hospitalized

Table 1: Distribution of commonly affected body parts

	Injury Area	Male	%	Female	%	Total	%
1	Head & Neck	200	25.15	85	24.7	285	25
2	Abdominal	45	5.65	29	8.43	74	6.49
3	Thoracic	13	1.63	5	1.45	18	1.57
4	Limb	538	67.58	225	65.40	763	66.92
	Total	796	100	344	100	1140	100

Discussion

Medical centers in this modern era are faced with the burden to curing preventable bone injuries (Oestern, 2014) [8]. The World Health Organization heightens that the traffic road accidents stem out as India's sixth factor that promotes the loss of lives. Although radiologists can diagnose the nature of the injury and recommend surgery and physical therapy to preserve the lives of these victims, more has to be done to prevent the injuries instead (McClafferty, 2009) [6]. Overall, the writers of this study advise the government improve the district's roads and educate the residents on safe driving to combat this growing issue.

Conclusion

To summarize, road traffic accidents are a major cause of bone injuries in this region of India. Regardless of that fact that prompt diagnosis and treatment can save the lives of these victims, prevention is better than cure. Therefore, through additional studies that address different aspects of bone injuries, radiological advancements, and government intervention the problem can be overcome.

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