FREQUENCY OF TRAUMA PATIENTS PRESENTING IN EMERGENCY DEPARTMENT

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ABSTRACT:
Injuries generally are classified by either severity, the location of damage, or a combination of both. Trauma also may be classified by demographic group, such as age or gender. It also may be classified by the type of force applied to the body, such as blunt trauma or penetrating trauma. This cross-sectional study was conducted in emergency departments of different hospitals. The patients presenting with trauma i.e., major or minor were enrolled in this study. Age, gender, and nature of trauma was noted on a predefined proforma. All the data was entered and analyzed with SPSS Ver. 23.0. There were 80 patients that were included in this study. The mean age of the patients was 31.3±2.12 years. There were 50 (62.5%) males and 30 (37.5%) females included in this study. Out of these 80, 4 presented with head injury, 12 presented with long bone trauma, 15 with single bone fracture and rest of the patients were of minor trauma.

KEYWORDS: TRAUMA
INTRODUCTION:
Injuries generally are classified by either severity, the location of damage, or a combination of both. Trauma also may be classified by demographic group, such as age or gender. It also may be classified by the type of force applied to the body, such as blunt trauma or penetrating trauma. For research purposes injury may be classified using the Barell matrix, which is based on ICD-9-CM. The purpose of the matrix is for international standardization of the classification of trauma. Major trauma sometimes is classified by body area; injuries affecting 40% are polytrauma, 30% head injuries, 20% chest trauma, 10%, abdominal trauma, and 2%, extremity trauma.

Various scales exist to provide a quantifiable metric to measure the severity of injuries. The value may be used for triaging a patient or for statistical analysis. Injury scales measure damage to anatomical parts, physiological values (blood pressure etc.), comorbidities, or a combination of those. The abbreviated injury scale and the Glasgow coma scale are used commonly to quantify injuries for the purpose of triaging and allow a system to monitor or "trend" a patient's condition in a clinical setting. The data also may be used in epidemiological investigations and for research purposes. Approximately 2% of those who have experienced significant trauma have a spinal cord injury. Injuries may be caused by any combination of external forces that act physically against the body. The leading causes of traumatic death are blunt trauma, motor vehicle collisions, and falls, followed by penetrating trauma such as stab wounds or impaled objects. Subsets of blunt trauma are both the number one and two causes of traumatic death.

For statistical purposes, injuries are classified as either intentional such as suicide, or unintentional, such as a motor vehicle collision. Intentional injury is a common cause of
traumas. Penetrating trauma is caused when a foreign body such as a bullet or a knife enters the body tissue, creating an open wound. In the United States, most deaths caused by penetrating trauma occur in urban areas and 80% of these deaths are caused by firearms. Blast injury is a complex cause of trauma because it commonly includes both blunt and penetrating trauma, and also may be accompanied by a burn injury. Trauma also may be associated with a particular activity, such as an occupational or sports injury. The body responds to traumatic injury both systemically and at the injury site. This response attempts to protect vital organs such as the liver, to allow further cell duplication and to heal the damage. The healing time of an injury depends on various factors including sex, age, and the severity of injury (1-3). The objective of this study was to see the frequency of patients presenting as trauma in emergency department.

MATERIAL OF METHODS:
This cross-sectional study was conducted in emergency departments of different hospitals. The patients presenting with trauma i.e., major or minor were enrolled in this study. Age, gender, and nature of trauma was noted on a predefined proforma. All the data was entered and analyzed with SPSS Ver. 23.0. The quantitative variables were presented as mean and standard deviation. The qualitative variables were presented as frequency and percentages.

RESULTS:
There were 80 patients that were included in this study. The mean age of the patients was 31.3±2.12 years. There were 50 (62.5%) males and 30 (37.5%) females included in this study. Out of these 80, 4 presented with head injury, 12 presented with long bone trauma, 15 with single bone fracture and rest of the patients were of minor trauma.
DISCUSSION:
Trauma is the sixth leading cause of death worldwide, resulting in five million or 10% of all deaths annually. It is the fifth leading cause of significant disability. About half of trauma deaths are in people aged between 15 and 45 years and trauma is the leading cause of death in this age group. Injury affects more males; 68% of injuries occur in males and death from trauma is twice as common in males as it is in females, this is believed to be because males are much more willing to engage in risk-taking activities. Teenagers and young adults are more likely to need hospitalization from injuries than other age groups. While elderly persons are less likely to be injured, they are more likely to die from injuries sustained due to various physiological differences that make it more difficult for the body to compensate for the injuries. The primary causes of traumatic death are central nervous system injuries and substantial blood loss. Various classification scales exist for use with trauma to determine the severity of injuries, which are used to determine the resources used and, for statistical collection.

By identifying risk factors present within a community and creating solutions to decrease the incidence of injury, trauma referral systems may help to enhance the overall health of a population. Injury prevention strategies are commonly used to prevent injuries in children, who are a high risk population. Injury prevention strategies generally involve educating the general public about specific risk factors and developing strategies to avoid or reduce injuries. Legislation intended to prevent injury typically involves seatbelts, child car-seats, helmets, alcohol control, and increased enforcement of the legislation. Other controllable factors, such as the use of drugs including alcohol or cocaine, increases the risk of trauma by increasing the likelihood of traffic collisions, violence, and abuse.
occurring. Prescription drugs such as benzodiazepines may increase the risk of trauma in elderly people.

The care of acutely injured people in a public health system requires the involvement of bystanders, community members, health care professionals, and health care systems. It encompasses pre-hospital trauma assessment and care by emergency medical services personnel, emergency department assessment, treatment, stabilization, and in-hospital care among all age groups. An established trauma system network is also an important component of community disaster preparedness, facilitating the care of people who have been involved in disasters that cause large numbers of casualties, such as earthquakes (4-6).

REFERENCES:


