DESCREPTIVE STUDY OF TRAUMATIC ABDOMINAL INJURIES AT KASR-ALAINY HOSPITAL

A CROSS-SECTIONAL STUDY DURING THE YEAR 2014

Thesis

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LIST OF ABBREVIATIONS

AAST	American Association for the Surgery of Trauma.
ABGs	Arterial blood gases.
CBC	Complete blood count.
CT	Computed tomography .
DL	Diagnostic laparoscopy.
DPL	Diagnostic peritoneal lavage.
ED	Emergency department.
EMS	Emergency medical services.
FAST	Focused abdominal sonography for trauma.
GSWs	Gunshot wounds.
HCO3	Bicarbonate
ICU	Intensive care unit.
WHO	World Health Organization.

ABSTRACT

Abdominal trauma is among the leading causes of morbidity and mortality in all age groups in the world. However, identifying serious intra-abdominal pathology due to trauma can be a challenge. The current work is a cross sectional descriptive study of cases admitted to Kasr Al-Ainy hospital during the period from 1st of January to 31st of December 2014 with traumatic abdominal injuries. Data were analyzed regarding demographic criteria, cause, manner, site and type of wound, accompanying injuries, radiological investigations, treatment, period of hospital stay and outcome.

The total number of the studied cases was 227. The most frequent age group being those between 18-40 years (72.2%) with male predominance (92.1%) and 93.4% of the cases were from Greater Cairo. The homicidal cases comprised the highest frequency among the studied groups (50.7%). Stab wound was the commonest type (58.1%) followed by firearm injuries (25.1%) and contused wound (14.1%). Regarding the cause, 81.9% of cases were due to violent assault and 72, 7% of the cases undergone surgery. Most of the cases were recovered (80.6%) and the mortality rate was 7%. Nowadays, cases of abdominal trauma are increasing at an alarming rate in all world communities. Proper management is the key for better outcome and prognosis.

Key words: (traumatic - abdominal - injuries - management - outcome)

INTRODUCTION

INTRODUCTION

Trauma is still the most frequent cause of death in the first four decades of life, and it remains a major public health problem in every country, regardless of the level of socioeconomic development. Abdominal trauma is a major public health problem for all nations and all socioeconomic strata. The abdomen is the third most common injured region after head and chest **(Gad *et al*., 2012).**

Abdominal trauma is increasing due to the growing number of vehicles on the roads, which leads to an increased incidence of road accidents. Urbanization, industrialization and additional problems are the other associated factors which accelerate this phenomenon. A better understanding of the etiology and pattern of such injuries can help to improve the management and ultimate the outcomes of these patients **(Hemmati *et al*., 2013).**

The abdomen is an extraordinarily important, yet unprotected area of the body, in addition to its lack of the protective structure, its size, intermediate location on the body and proportion of the body's area which increases its vulnerability to injury. Injury to the abdomen is a potential hazard, and recognizing the signs of serious damage is imperative. Abdominal injuries can be lethal and the severity of any injury should not be underappreciated **(Barrett and Smith, 2012)**.

Abdominal trauma is traditionally classified as either blunt or penetrating abdominal trauma. Blunt abdominal injuries predominate in rural areas, while penetrating ones are more frequent in urban settings. Penetrating abdominal trauma is often subdivided into stab wounds and gunshot wounds, which require different methods of treatment **(Hemmila and Wahl, 2008).**

The most common fatal sequel to intra-abdominal trauma is hemorrhage from any of the contained organs. Mortality could be reduced through early intervention at the scene by emerging technology **(Ogura *et al*., 2015).**

The diagnosis of abdominal injury by clinical examination is unreliable, so abdominal trauma diagnosis requires decisive investigation and management, ultrasound is the investigation of choice in hemodynamically unstable patients, computed tomography is the investigation of choice in hemodynamically stable patients **(Jansen *et al*., 2008).**

Treatment of abdominal trauma begins at the scene of the injury and is continued upon the patient's arrival at the emergency department (ED) or trauma center. Management may involve non-operative measures or surgical treatment **(Cirocchi *et al*., 2013).**

AIM OF THE WORK

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The aim of this work is to statistically study traumatic abdominal injuries cases admitted to Kasr Al-Ainy hospital during the period from 1st of January to 31st of December 2014 regarding demographic data, manner, cause of injury, type, site of wound; abdominal organs injury, associated body injuries, radiological investigations, complications, treatment, outcome and period of hospital stay.