

INTRODUCTION

Traumatic injury account for the majority of unnatural deaths throughout the world with cardiac trauma being the leading cause of death among these victims. Understanding the mechanisms of injury as well as complications associated with cardiac trauma is important from both clinical and legal point of view(*Salehian et al., 2003 and Fedkar et al.,2005*).

Traumatic cardiac injuries are considered one of the most commonly overlooked injuries in patient who died from trauma and characterized by two main mechanisms of injury (blunt and penetrating trauma).The penetrating cardiac trauma is identified as the major cause of cardiac injury and is often associated with high mortality rate in which most of the victims died either at scene or shortly thereafter and is mainly caused by knives, bullets and other projectiles. Gun shot injuries of the heart portend a worse prognosis than stab wounds. On other hand, the major causes of blunt cardiac injury are high-speed motor vehicle collisions, fall from heights, and act of violence, explosion and cardiac resustative procedures. Blunt trauma of the heart can produce a spectrum of life-threatening or fatal cardiac injuries ranging from commotio cordis to cardiac contusion to rupture of the heart (*DiMaio and DiMaio, 2001 and Mandal and Sanusi, 2001*).

Deaths due to traumatic heart injuries represent a significant number of medicolegal deaths in Egypt in which a very low percentage of the victims reach hospital alive and in fact that a few studies are concerning

with the epidemiology and medicolegal aspects of fatal traumatic heart injuries in our country , so epidemiological studies especially autopsy results should be carried out and documented as it has a significant importance being enable us to identify the character of cardiac injuries, the magnitude of the problem as well as the pattern of unnatural deaths in such cases which considered a reflection of the prevailing social setup and mental health status of the region.