

RECENT UPDATES IN MANAGEMENT OF CHEST TRAUMA

Essay

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General Surgery

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٢٠٠٨

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

نَرْفَعُ دَرَجَاتٍ مِّنْ نَّشَأٍ
وَفَوْقَ كُلِّ ذِي عِلْمٍ عَالِمٌ

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Introduction

Trauma is the 3rd leading cause of death in the world exceeded only by cardiovascular diseases and cancer (*Cogbill et al., 2004*).

With the growth of traffic, industrialization, in our society there has been a proportional increase in incidence of trauma and as a consequence of trauma to chest (*Fabian et al., 2003*).

The earliest known medical writings have included description of thoracic injuries. The Smith Papyrus which was written 3000 B.C., described the care of three chest injury by Egyptian Imotep. In second century, Galen described a spectacular injury that left the heart exposed. *Rehn, (1897)* was able to successfully suture a stab wound in the heart while *Harken (1947)* reported an amazing experience of foreign body removal from the heart .Almost all other surgical attempts to correct cardiac injury awaited the extra corporeal circulation by Gibbon (1957) (*Cogbill et al., 2004*).

Thoracic injuries have contributed greatly to morbidity and mortality from trauma. The danger and importance of thoracic trauma lies in that the

result of all types of chest trauma in their acute phase is disrupted tissue perfusion with attendant hypoxia and metabolic acidosis. Therefore the initial care must involve an accurate diagnosis and appraisal of those anatomic or pathologic status that threaten the patient's life. All emergency care should be directed towards the establishment of a level of ventilation and cardiovascular function that will be compatible with survival (*Symbas, ۲۰۰۶*).

These injuries may result from various forms of trauma penetrating, blunt or explosive trauma. The penetrating injuries are usually due to missile or stab wound injuries. In civilian life, the majority of injuries are due to stab wounds whereas in the military most of the injuries are due to missile wounds (*Cogbill et al., ۲۰۰۴*).

Trauma to the thorax may cause injury to any one or frequently more of the thoracic structures: heart, great vessels, lungs, major airways, esophagus, diaphragm and chest wall. Although injuries of the intrathoracic structures usually are accompanied by chest wall injuries, trauma of the intrathoracic organs may occur without a noticeable chest wall injury (*Fabian et al., ۲۰۰۶*).