Recent Trends and Update in Management of Chest Injury

Essay

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In General Surgery

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Introduction

Chest injuries are common and in civilian life are sustained by the same mechanisms as abdominal trauma. Not infrequently the injuries are thoracoabdominal. The majority are caused by blunt trauma from road traffic accidents, although stab and missile injuries are on increase. Whereas minor injuries involve only the ribcage without significant adverse consequences, major injuries are associated with injury to the vital organs, i.e. Lungs, trachea, major bronchi, great vessels and heart .***(Cushieri, 1996).***

Trauma is the third cause of death exceeded by cardiovascular disease and cancer. It ranks first in the age group between 15-35. 25% of trauma mortalities are secondary to chest trauma.

In another 25% of trauma mortalities chest trauma aids significantly to the death. Injury to the thorax alone carries a mortality of 4-12%. ***(Locicero and Mattox, 1998).***

Chest trauma or (Thoracic trauma) is a serious injury of the chest. Thoracic trauma is a common cause of significant disability and mortality, the leading cause of death from physical trauma after head and spinal cord injury. Blunt thoracic injury is the primary or a contributing cause of about a quarter of all death. ***(Keough and Pudelek, 2001).***

Mortality rate is about 10% of blunt thoracic injuries ***(Moloney et al., 2008).***

Chest injuries were first described in detail in around 1600 BC in the ancient Egyptian Edwin Smith papyrus .***(Millers and Mansour, 2007).***

Trauma is the leading cause of mortality and disability during the first decades of life, and is the third most common cause of death overall. The direct cost to society in caring for the victims of trauma is enormous, for many instances trauma affects young individuals, and their loss of productivity at work is immense. ***(Mann, et al; 1997).***

Multiple care patterns and treatment modalities have emerged, many based on clinical observation and evidence, within the last 20 years. More rigorous scientific methods have been applied to the problem of flail chest, in both the clinical setting and laboratory. More advanced radiologic work-up with multislice computed tomography (MSCT) scanners is increasing the frequency of diagnosis of this problem. Some articles reviews the most salient data of the recent literature and discusses some of the diagnostic and treatment options that are available in the treatment of chest trauma. ***(Sauti Gezer, 2009).***

Several indications for thoracotomy previously cited are now considered controversial, because alternative forms of evaluation and therapy are available. Furthermore, some patients with thoracic injury develop conditions that require thoracotomy at later time .***(Kenneth and Mattox, 2000).***

Aim of the Work

- **This work aims to** acquiring knowledge on chest trauma and to develop attitudes which enable us to decision and carry out the necessary actions with skill and care for patients.
- **The work aims also to** evaluate the different advance techniques for management of chest trauma in different age groups to put our selection criteria for each invasive and non invasive technique according to patient situation, indication and contraindications.
- **To review** the recent management regimens of chest trauma and estimation of those with better mortality and morbidity rates following advance guidelines.

Review of Literature

1- Anatomy of Chest.

2- Mechanism of trauma.

3- Complications.

4- Diagnosis.

5- Management.

6- Recommendations.

7- Summary.

English

Arabic

8- References.

References

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