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Diaphragmatic Injuries

Tawfik Ali Abuzalout, Mohammed Ismael alswehly

Abstract

Objective:

Diaphragmatic injuries (DI) are frequently over looked and remain a challenge to the treating surgeon.

The purpose of our study is to analyze the incidence, mechanism of injury, the diagnosis and the treatment as well as the outcome of the DI and to discuss the difficulties in their diagnosis.

Material and Methods:

A retrospective chart review of all patients operated on for blunt and penetrating injuries of chest and abdomen at Al-Jala hospital in Benghazi in the period from jan.2004 to Dec.2008. 427 operated patients for thoraco-abdominal trauma, blunt 263(61.6%) and penetrating 164 (38.4%), of which 41 patients (9.6%) with DI were included in this study. Demographic data, diagnosis, treatment and outcome were analyzed

Result:

Twenty nine patients (70.7%) had civilian penetrating diaphragmatic injuries (PDI) and twelve patients had blunt diaphragmatic trauma (BDT). Three cases of BDT had a delayed diagnosis (> 24 hours) : chest roentgen and two of PDI had a delayed diagnosis (3 years after stab injury). Mortality rate 13.8% (4 patients), 3 after gunshot and only one after stab due to other associated injuries. For BDT mortality rate was 25% (3 patients) which is more than that of PD

Conclusion:

The preoperative diagnosis of DI is difficult and in our group the diagnosis was made in almost

all the cases during the emergency laparotomy or thoracotomy or both for penetrating wounds. The diagnosis of BDT is more difficult and can be suspected by abnormal chest signs. The role of laparoscopy or thoracoscopy in detecting DI should be considered in the future in our country. A high rate of suspicion is needed to detect DI and to avoid the fatal complications i.e. strangulation of visc

Corresponding author: Tawfik abuzalout, surgical deptment, faculty of Medicine, Benghazi University

Email :tawfikz_salem@yahoo.com

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