

Traumatic Diaphragmatic Lesions – Considerations Over a Series of 15 Consecutive Cases

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Abstract

Introduction: Diaphragmatic injuries are produced by blunt or penetrating thoracoabdominal trauma. They are potentially life-threatening due to the herniation of abdominal organs into the pleural cavities and severe associated lesions. The aim of this retrospective study was to analyse the clinical presentation and management of patients admitted with diaphragmatic rupture in our institution.

Material and Method: We performed a 5-year retrospective study of patients admitted with acute blunt or penetrating diaphragmatic rupture in the Department of General Surgery of "Bagdasar-Arseni" Emergency Hospital. We have studied sex, age, mechanism of trauma, side-location, time-to-diagnosis, concomitant injuries, surgical treatment and outcome.

Results: Fifteen patients (8 males, 7 females, mean age: 42 years) with diaphragmatic rupture (left-side: 13, right-side: 2) following blunt (8 patients) or penetrating (7) trauma were included. Patients with blunt diaphragmatic injury had larger tears and abdominal viscera herniation was observed in 6 of these cases. A direct suture was performed for all 15 patients. Laparotomy was the surgical approach preferred in most of the cases. Mortality rate was 20%, mainly caused by severe associated lesions.

Conclusion: Although traumatic diaphragmatic lesions are frequently associated with severe cerebral and thoraco-abdominal trauma that is also the main cause of death, a prompt diagnosis and treatment can lead to good outcome.

Key words: traumatic diaphragmatic lesions, penetrating trauma, blunt trauma