December 1998 (Volume 39, Number 4)

## Treatment of Penetrating Chest Injuries during the 1992-1995 War in Bosnia and Herzegovina

Samir Delibegoviæ Dediæ, Mehmedalija Budalica1, Mustafa Bazardžanoviæ2

Department of Surgery, Tuzla University Hospital; 1Department of Thoracic Surgery, Sarajevo University Hospital; and 2Tuzla University School of Medicine, Tuzla, Bosnia and Herzegovina Aim. To assess the need for and significance of immediate thoracotomy compared to conservative treatment (thoracostomy and/or thoracocentesis) of penetrating chest injuries.

Methods. Retrospective analysis was performed on medical records of 743 war wounded patients treated for chest injuries in the Department of Surgery, University Hospital Tuzla, between January 1992 and December 1995. Minimally invasive (tissue saving) surgery was the most frequent method applied, which usually included sutures of the lungs after débridment of margins and hemostasis, followed by atypical resection.

Results. Out of 743 patients, there were 414 (55.7%) cases of immediate thoracotomy, whereas 295 (39.7%) who were treated conservatively, including thoracostomy and/or thoracocentesis. Twenty four (3.2%) patients died at admission, and 10 (1.3%) did not require any surgical treatment. The most frequent complications were secondary wound infection (10.8% in the conservative treatment group and 2.5% in the group treated by thoracotomy), pleural effusion (19.3% in the conservatively treated group and 10.8% in the group treated by thoracotomy), and empyema (5.1% in the conservatively treated group and 13.4% in the group treated by thoracotomy).

Conclusion. Our results are similar to those reported for other war situations but surgeries were very often performed on the basis of subjective judgements on the severity of the patient's clinical condition and necessity for thoracotomy.

**Keywords:** Bosnia and Herzegovina; chest injuries; hospitals, military; lung injury, acute; mortality; thoracic surgery; thoracotomy; thoracostomy; war

Copyright © 1997 by the Croatian Medical Journal. All rights reserved. Created 20/1/99 - Last Modified 20/1/99 Created and maintained by: Tinman