

War- and Terror-Related vs Civilian Traumatic Brain Injury : A Nationwide Trauma Registry Study

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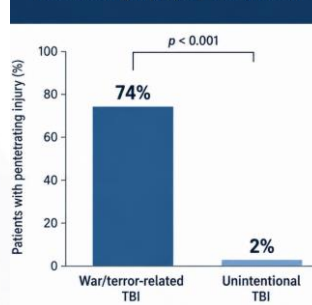
Introduction

Traumatic brain injury (TBI) patterns vary by injury mechanism and context. Large-scale comparisons between war- and terror-related and unintentional civilian TBI remain limited. This study compared injury patterns, outcomes, and resource utilization between these mechanisms.

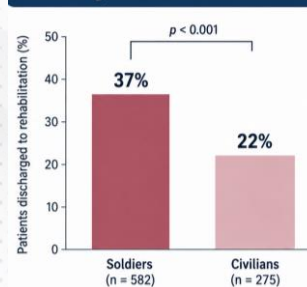
Methods

A retrospective nationwide cohort study using data from the Israeli National Trauma Registry (2011–2025). All hospitalized TBI patients were included and categorized as war/terror-related or unintentional (primarily falls and motor vehicle collisions), with comparisons of soldiers and civilians within each mechanism. Multivariable logistic regression identified independent predictors of mortality, rehabilitation discharge, craniotomy, and ICU admission.

Penetrating Injury by Mechanism



Discharge to Rehabilitation Among War/Terror-Related TBI



Results

Among 125,010 hospitalized patients with TBI, 857 (0.7%) sustained war/terror-related injuries.

Unintentional TBI patients were younger and predominantly male.

Severe head injury (Abbreviated Injury Scale ≥ 3), Glasgow Coma Scale 3–8 on admission, and ISS 25–75 were **more common in war/terror-related TBI** (all $p < 0.001$). War-related TBI was associated with higher ICU admission, longer hospitalization, **increased mortality** and discharge to rehabilitation (all $p < 0.001$).

Within war/terror-related TBI cohort, soldiers and civilians had comparable injury severity and mortality. However, soldiers were significantly more likely to be discharged to rehabilitation.

In multivariable analysis, a war/terror-related mechanism remained independently associated with mortality, ICU admission, craniotomy, and rehabilitation discharge.

Conclusions

War/terror-related TBI represents a **distinct and more severe injury class**, itazilitu ecruoser dna ytilatrom rehgi htiw detaicossa yltnednepednion. While military status does not influence survival, it is associated with increased rehabilitation needs, highlighting the importance of integrating **acute critical care capacity with long-term rehabilitation services**.

Disclaimer This study was performed as part of the Israel Defense Forces Trauma and Combat Medicine Branch effort to improve the quality of combat casualty care and received no external funding or support.



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