

WG 2 (Preventive Medicine and Healthcare Policies)

Infectious Complications Following Military Trauma – A Multicenter Nationwide Retrospective Study

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Background and Purpose:

The IDF Medical Corps achieved one of the lowest recorded case fatality rates in modern warfare during Swords of Iron War, largely attributed to the effective management of critically injured patients who, despite their severe injuries, could reach hospitals for definitive care. However, the higher severity of these injuries placed them at significant risk for infectious complications. Current IDF protocols recommend prophylactic antibiotics for penetrating trauma when evacuation exceeds one hour. Recent reports of fatalities among severely injured combatants caused by infections from resistant microorganisms underscore the pressing need to reevaluate and enhance infection prevention and management strategies.

Methods:

This planned retrospective study will analyze battlefield trauma casualties evacuated during one year of ground maneuver, starting October 2023. Data collection will involve prehospital records from the IDF Trauma Registry detailing injury mechanisms, treatments (including antibiotic prophylaxis), and evacuation characteristics. Alongside hospital records documenting clinical outcomes, infectious diagnoses, microorganisms isolated in the first week and those linked to infectious events, and antibiotic treatments. Additionally, long-term infectious outcomes up to three months post-hospitalization will be assessed.

Results:

This study aims to include 2,074 casualties hospitalized for ≥ 24 hours across 10 medical centers nationwide, capturing nearly all eligible cases. The cohort consists of casualties with injury severity score (ISS) distributed as follows: 1-8 (57%), 9-14 (22%), 16-24 (11%), and ≥ 25 (9.6%). Among casualties, 719 (35%) were hospitalized for > 1 week, and 512 (25%) required intensive care unit admission. The median evacuation time was 78 minutes (IQR 58-113), with urgent cases evacuated in a median of 72 minutes (IQR 56-100). Integrating prehospital data with the temporal dynamics of microbiological findings will allow us to better characterize infectious complications in military trauma.

Conclusion:

This study aims to address key gaps in understanding infectious complications in military trauma. By identifying risk factors, correlating prehospital data with clinical and microbiological outcomes, and characterizing pathogen profiles, the findings are expected to inform updated infection management strategies, ultimately enhancing care for military casualties.

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Outbreak of Impetigo in a Military Training Base: A Case Review from Kfir Training Base

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Background:

Impetigo is a highly contagious bacterial skin infection, commonly seen in crowded environments such as military training bases. In June 2024, an outbreak of Impetigo occurred at the Kfir training base, affecting a significant number of trainees.

Objective:

To review the epidemiological characteristics, risk factors, and management strategies of the outbreak, highlighting key lessons for prevention and control in similar settings.

Methods:

A retrospective analysis of the outbreak was conducted, including clinical presentation, laboratory findings, and treatment approaches. Infection control measures and their effectiveness in containment were also assessed.

Results:

The outbreak affected 151 trainees. The primary pathogen identified was *Staphylococcus aureus*. Initial treatments included topical and systemic antibiotics. Key risk factors include skin to skin contact and shared equipment.

Conclusions:

This outbreak underscores the importance of early detection, strict hygiene protocols, and prompt medical intervention in controlling impetigo in high density military environments. Recommendations for future prevention include enhanced hygiene education and improved infection surveillance.