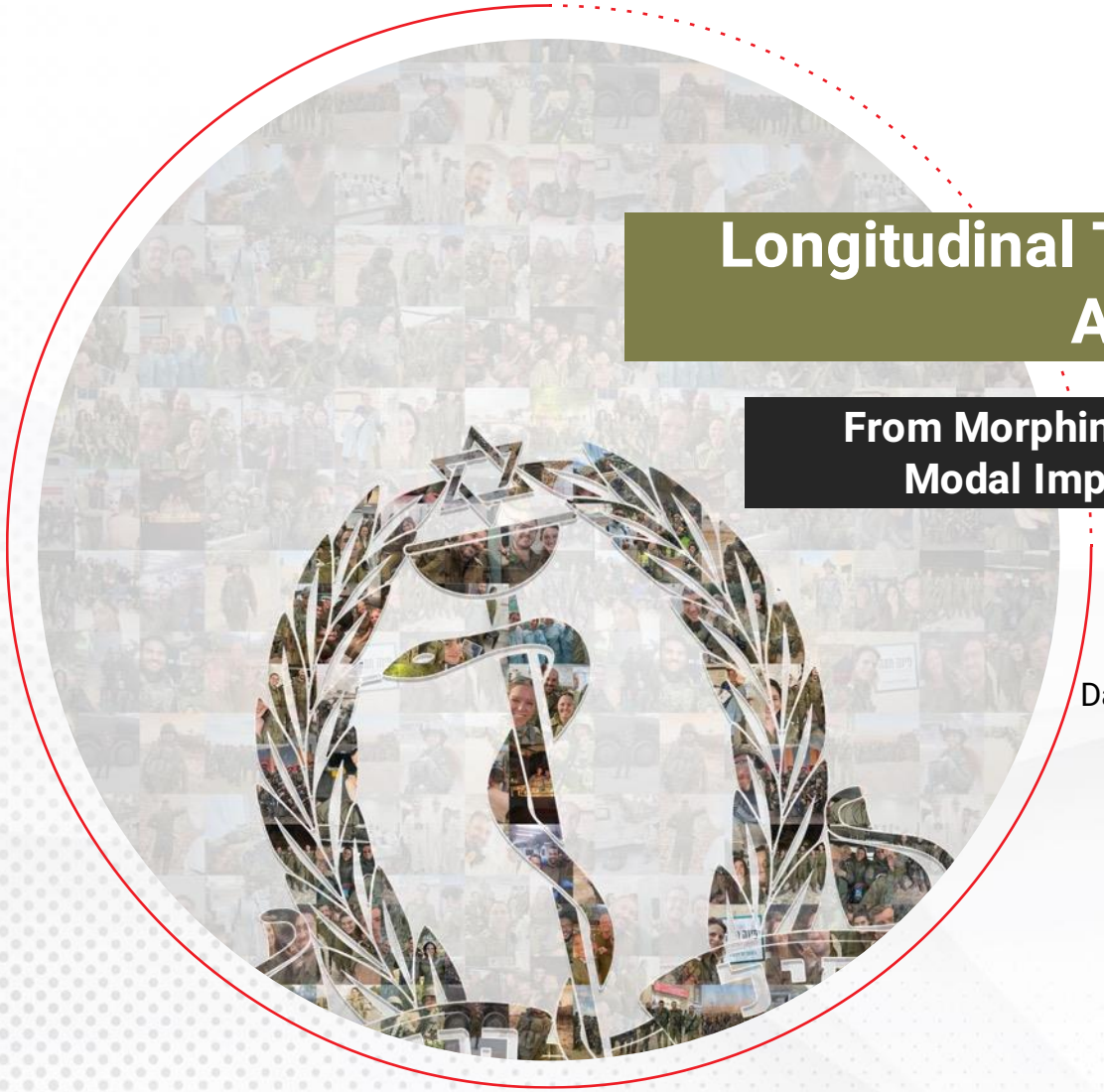

Longitudinal Trends in Prehospital Analgesia

From Morphine-Centric Protocols to Multi-Modal Implementation (2006-2025)

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At the moment of truth,
IDF MEDICAL CORPS.

Disclosures

MD , Teva Amir MD MHA , Harel Gershgoren MD , Danielle Akler MD , Irina Radomislensky BSc , Pavel Eidelman MD MPH , Inbal Dym MD , Gal Khanchin MD , Bar Zemer Tov MD ,Guy Avital MD , Guy Vishnevsky MD MPH MBA , Arthur Shapiro MD.

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The Rationale: Addressing the "Pain Management Gap"

The Clinical Need

Prehospital pain management at the Point of Injury (POI) is essential for casualty care, but has been historically underutilized.

Tactical Constraints

Over the last two decades, the IDF-MC has transitioned from morphine-centric protocols to a **diversified multi-modal strategy.**

Two critical Protocol shifts catalyzed the evolution of battlefield care

Methodology –A Longitudinal Perspective

- **Data Source:** Retrospective longitudinal analysis based on the **IDF Trauma Registry**.
- **Study Population:** All recorded casualties during three major combat periods:
  - **SLW (2006):** Second Lebanon War.
  - **OPE (2014):** Operation Protective Edge.
  - **SOIW (2023-2025):** Swords of Iron War.
- **Focus of Analysis:** Potent prehospital analgesia administration at the Point of Injury (POI).
- **Agents Evaluated:**
  - **OTFC (Actiq):** Oral Transmucosal Fentanyl Citrate.
  - **Ketamine:** Intravenous (IV).
  - **Morphine:** Intravenous (IV) and Intramuscular (IM).

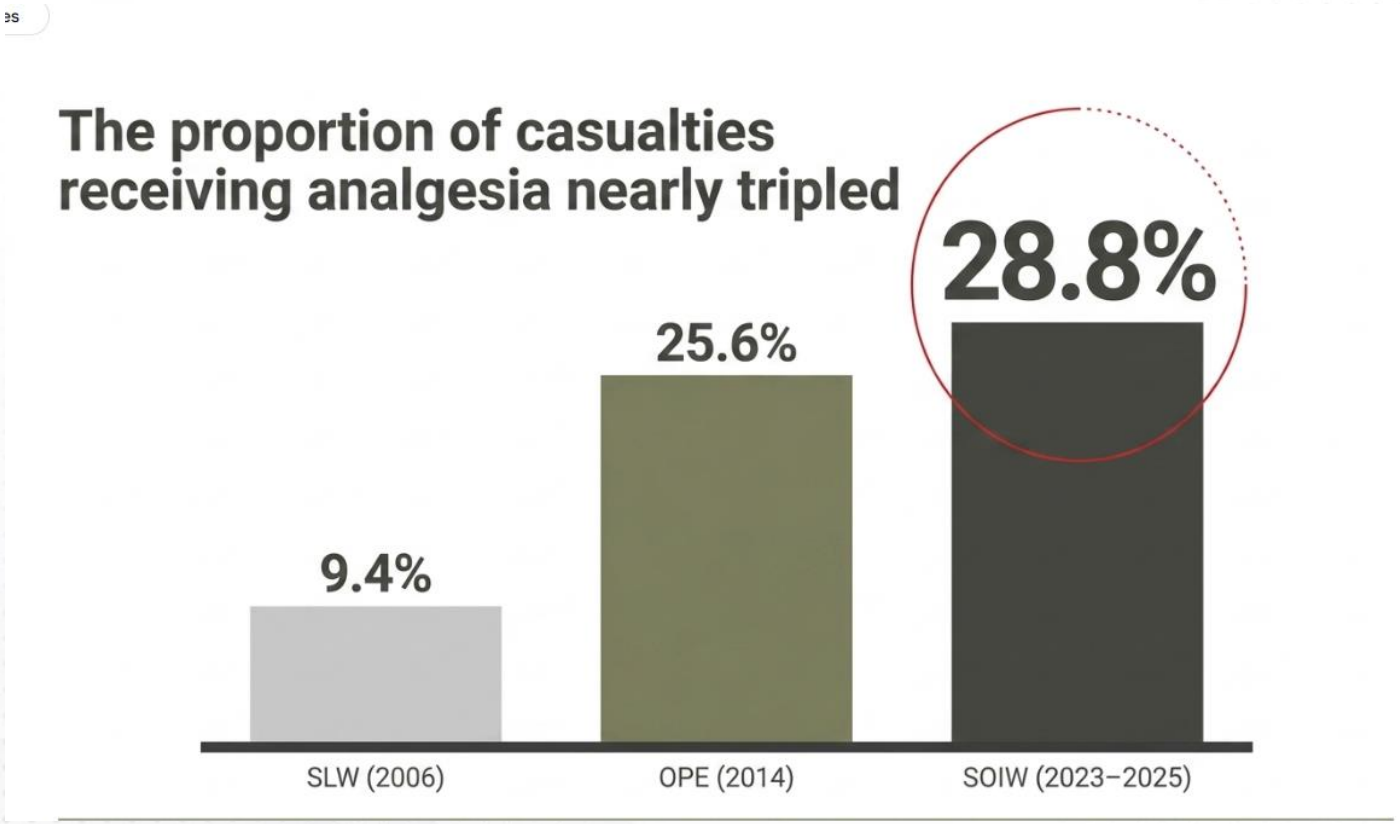
Results

Increased analgesic treatment rate

Decentralized access to analgetic treatment

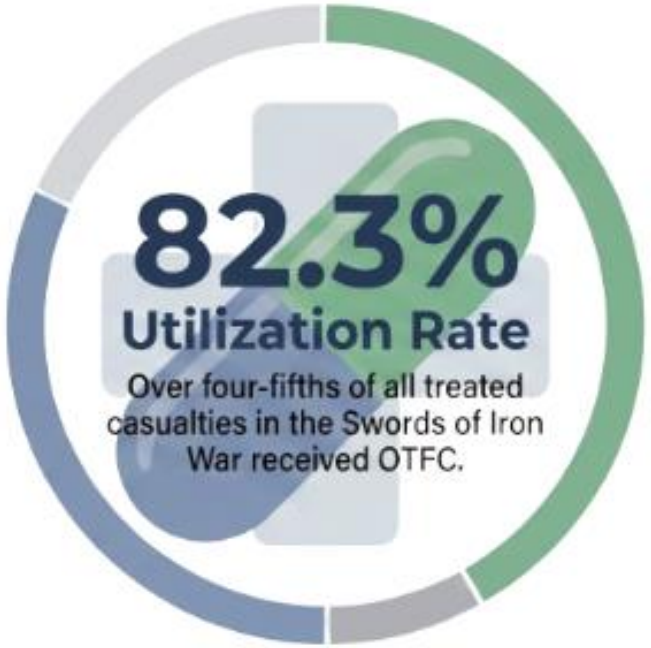
Shift to more hemodynamically stable drugs in combat trauma

Tripling the Analgesia Treatment Rate



Key Takeaway: This trend demonstrates a significant expansion in clinical reach and the successful implementation of protocols under high-intensity combat constraint

The OTFC (Actiq) Revolution & Task Shifting



Multi-Modal Breakdown of OTFC Administration

64.8%
Standalone Agent
The majority of OTFC recipients were managed with the single agent for effective pain control.

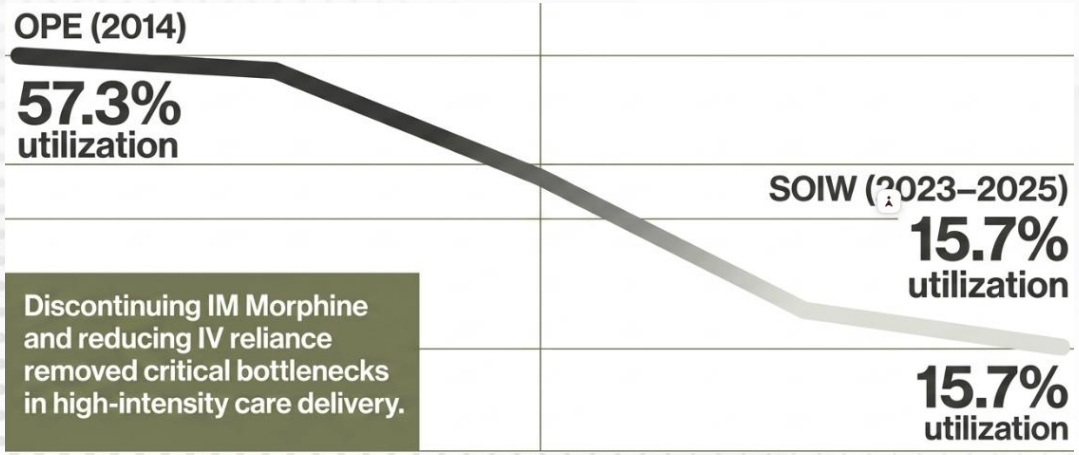
29.1%
Multi-Modal Combination
Nearly one-third of recipients received OTFC in combination with

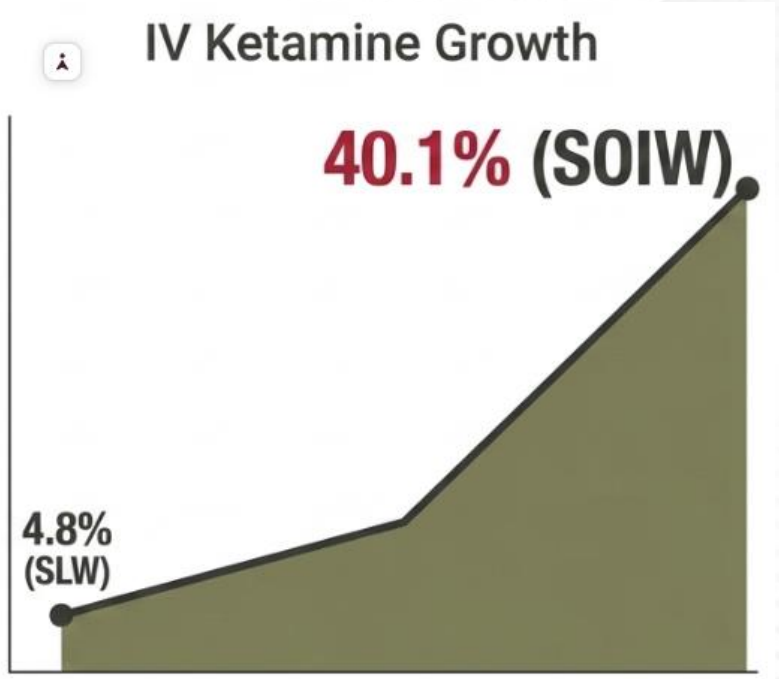
6.1%
Other Combinations

Changing the Standard: The Rise of Ketamine and Decline of Morphine

•Iv Morphine use dropped from 57.3% in 2014 (OPE) to 15.7% in SOIW

• **2020 Milestone:** Intramuscular (IM) Morphine was completely discontinued from IDF protocols.





Limitations and Future Directions

- **Retrospective Design**
- **Documentation Gaps**
  - Insuficiant recording of **pain scores** (NRS) during the prehospital phase.
  - Potential under-reporting of analgesia administration under intense tactical constraints.
- **Process vs. Outcome**
  - This study measures **treatment penetration** rather than **clinical efficacy**
  - Further research is needed to correlate increased analgesia rate with long-term clinical outcome and casualty satisfaction.

THANK YOU

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IDF MEDICAL CORPS.