

WG 6 (Forensic Pathology)

Challenges of Identification and Death Investigation of Victims of Iron Swords

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In the surprise attack on Saturday, October 7, 2023, the Jewish holiday of Simchat Torah, the terrorist organization Hamas invaded Southern Israel, killing over 1100 Israelis and foreign nationals, of which over 400 were soldiers, police officers, and security service personnel, and abducted 251 to Gaza. Since then the number has risen to over 1800 of which over 900 are soldiers and other security personnel.

The Forensic Identification unit of the IDF Medical Corps, with the guidance of the National Institute of Forensic Medicine, is responsible for determining the identity and cause of death of all fallen soldiers. Included in its responsibilities are also evaluation of treatment, effectiveness of protective gear, and identification of types of weapons and munitions.

In this talk we will elaborate on the unique challenges posed by the current conflict for execution of these tasks. These challenges include the logistical complexities created by the unprecedented numbers of victims at the same time, difficulties of evaluation of victims recovered during active combat, difficulties in triage of civilian vs military personnel, large numbers of decomposed, incinerated or detached remains, and the particularly difficult cases of commingled remains. To this it is necessary to point out the added burden and complexity surrounding the simultaneous identification and assessment of casualties among the enemy forces.

These challenges, their qualifications, and the solutions employed will be discussed.

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Until They All Come Home: The Use of Anatomy and Anthropology in Casualties Identification

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The Identification of Casualties in Extreme Scenarios: Lessons from the "Iron Swords" War -

The "Iron Swords" War is one of Israel's most difficult conflicts, beginning with a surprise attack on October 7 resulting in ~1,200 casualties. The high number of casualties, severe body conditions, and difficulty distinguishing between Israeli victims and terrorists made identification especially challenging.

Unlike small-scale incidents, this mass-casualty event involved civilians, soldiers, and foreign workers in chaotic combat conditions. Identification required collaboration between forensic experts, criminal investigators, military and civilian rabbinate, and legal authorities. The Military Rabbinat and Medical Corps worked extensively to identify both military and civilian casualties.

There are four well-established methods for identifying casualties: personal recognition, fingerprint analysis, dental comparison, and DNA matching. However, in extreme scenarios—such as severe burns, significant bodily trauma, or mass-casualty events—these methods may not always be helpful.

This lecture covers three such cases.

Burned Military Command Center – A fire reaching 1,000°C prevented conventional identification of 15 fallen soldiers. A combination of skeletal reconstruction, advanced dental analysis, and survivor testimonies enabled full identification.

Mass-Casualty Event – Such events, involving a large number of body fragments—sometimes numbering in the hundreds or thousands—that required identification and classification. Deep anatomical knowledge is crucial in prioritizing remains for DNA testing facilitate identification and even to establish the legal declaration of death.

Burned Skeleton in a Kibbutz –Despite multiple attempts, no viable DNA could be extracted. Following an extensive investigation, an additional body part was recovered, which was conclusively identified as belonging to the same individual. This organ provided viable DNA, leading to a definitive identification.

These cases highlight the need for teamwork, forensic expertise, and creative problem-solving in large-scale disaster victim identification.