F31 The Dental Identification of the Swedish Tsunami Victims in Thailand

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After attending this presentation, attendees will understand the complexity of the identification procedures when the victims and the identification teams come from more than 30 nations.

This presentation will impact the forensic community and/or humanity by describing an unprecedented effort in peacetime - the identification of more than 5000 victims of the tsunami disaster in Thailand. Identification teams from more than 30 nations cooperated in the identification work, which was coordinated by the Interpol. It took more than a year, resulting in the successful identification of nearly 90 % of the victims.

Background: On the morning of December 26, 2004, a 9.5 earthquake occurred under the seafloor in the Bengal Bay, off the coast of the Indonesian province of Banda Aceh. The earthquake displaced enormous quantities of water, which moved toward the surrounding coasts turning into giant Tsunamis as the waves neared land. The disaster hit Indonesia first causing the death of nearly 200,000 people. The coastal areas of other countries around the Bengal Bay were devastated later as the Tsunamis spread. Sri Lanka, India, and Thailand were the countries second in the path and thousands of people lost their lives there. Hours later there was also loss of life as far away as the Maldives and the east coast of Africa. Among the more than 5000 victims of the Tsunami disaster in Thailand about half were western tourists and 543 of them were Swedish. This was the greatest mass disaster that had affected Sweden since the Estonia ferry disaster in 1994, when several hundreds of Swedish citizens lost their life.

Aims: The aim of this presentation is to describe the complexity of the work of identifying the victims of the Thai Tsunami Disaster.

Material and Methods: The task of identifying the deceased was undertaken by the identification teams from 32 countries. The *antemortem (*AM) data were gathered in the home countries and sent to Thailand. The p*ostmortem* (PM) investigations were conducted in the makeshift morgues on several locations around Kaolak, Phuket, and Krabi areas. The AM and PM information was inserted into the Interpol Disaster Victim Identification Program (DVI), which was put up in a computer network at the Thai Tsunami Victim Identification Information Management Center (TTVIIMC) in Phuket, Thailand. Experts from all disciplines were involved in the identification work. The National Board of Forensic Medicine sent out 50 experts during the year that the identification effort was carried out. Twenty-nine of them were dentists, working both in the Home Commission in Stockholm, Sweden, collecting and transcribing the dental records of the missing persons into the DVI database, as well as in the field gathering the PM information that included the description of the dental status, photographs and dental X-Rays. Many dentists were also involved in the TTVIIMC in Phuket, where they made transcriptions of dental records into the computer system and conducted reconciliation work (search and comparison) matching the AM and PM records.

Results: Whereas most of the Thai victims of the Tsunami were identified by fingerprinting, the majority of the western victims were identified by dental comparison alone (around 80 %), and in another 10 % of the cases the dental matching played a significant role in the identification process. Out of the 543 Swedish victims, 528 have been identified, 374 of them by dental status alone. Another 55 have been identified by a combination of methods including dental comparison.

Conclusion: Dental identification requires a great amount of manpower when many victims are involved, but it is a swift and extremely reliable means of identification of human remains. In the case of the Tsunami disaster the forensic odontology proved to be the most useful discipline in the identification process of the western victims.

Tsunami, Mass Disaster, Dental Identification

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