



F32 Maxilla Removal: The Best Technique to Achieve Dental Identification?

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After attending this presentation, attendees will understand how maxilla removal is easy to realize and aids in victim identification.

This presentation will impact the forensic community and/or humanity by assisting attendees in considering maxilla removal as a classic technical and not as an abnormal practice.

Identification has only one purpose; give a body the right identity. Therefore the expert has to insure that all of the conditions are present to reach the truth.

Considering the dental identification, charting has to be done the most accurate way possible and all the further examinations performed in good conditions.

The French presence in Thai Tsunami Victim Identification process from January to June 2005 allowed researchers to draw the conclusion from this common work.

Two periods can be described; January 2005, when it was possible to remove both maxilla and mandible, and after January 2005, when only the mandible sampling was permitted.

The conclusions from the Tsunami experience were:

- Dental charting was often was difficult when the maxilla wasn't removed.
- Maxillary X-Rays were difficult to take because of the same conditions.
- Cleaning and photographing non-removed specimen weren't good enough.
- Many teeth were lost or impossible to find on/in dead bodies and body bags.

Therefore, observing numerous incomplete or imperfect autopsies, quality control led to numerous re-examinations; consequently losing precious time both for the families and the experts.

Previous experiences in France provided the opportunity to apply the AFIO (French Association for Odontologic Identification) standard, which is mandatory maxilla and mandible removal in disaster victims identification.

The first experience is the "Ordre du Temple Solaire" massacre. Sixteen persons were shot and partially burned, including adults and children. The removal of maxilla and mandible allowed systematic orthopantomograms, very helpful for children age estimation and in many cases for comparative studies.

In the "Essoye disaster", 8 victims died in a house fire. Maxillas and mandibles were resected, orthopantomograms taken and, in the same way as the previous case, children age estimations and comparative examinations were completed.

For the "Concorde crash", 113 bodies were examined. Maxillas and mandibles were removed and for the first time, the samples were stored apart in plastic boxes. Obviously the boxes were clearly labelled. The perfect quality of the antemortem data, collected by German Police, allowed 112 identifications without any postmortem X-Rays.

In the "Tunnel du Mont-Blanc fire", which involved 39 victims, most of the bodies were very severely destroyed. Only five bodies were complete and for those one maxilla and mandible were removed.

The purpose of this work is to summarize the main different experiences of the French experts for the last 10 years.

In the researchers' opinion, and according to International Organization for Forensic Odonto Stomatology recommendations for disaster victim identification, it seems essential to remove both maxilla and mandible.

This removal is necessary to clean, handle and examine accurately the anatomical pieces. The dental chart is completed without any missing detail and a standardized photographic protocol can be applied. Radiographies under any angle can be taken without danger. The radiographic data can be completed with orthopantomograms.

The storage is easy using plastic boxes that can be kept in the body bags, avoiding the loss of any evidence and permitting re-examination in better conditions.

The moral aspect is obvious, but where is ethics; leave a body unidentified or do everything to succeed? Can the best technique to achieve identifications be avoided?

Victim Identification, Maxilla Removal, Forensic Odontology