



## Odontology Section – 2006

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### **F18 Suggested Protocol for Jaw Resection During Mass Fatality Incident Response**

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The goal of this presentation is to understand when the decision making process for resection begins, understand the indications for jaw resection, and understand a suggested resection technique to minimize destruction of anatomic structures.

By consulting with other colleagues early in the process, the odontologist is able to obtain needed information to facilitate the identification process while preserving anatomic structure for other forensic specialists and funeral directors. This presentation will impact the forensic community by expediting the identification process and facilitate the return of remains to family and loved ones.

The objective of dental operations in the morgue during response to a multiple fatality incident is to identify remains accurately and efficiently in the most expeditious manner possible. An ideal protocol calls for a thorough clinical examination of the remains in addition to radiographic examination to the greatest extent possible. The identification process is certainly facilitated by utilization of WIN ID and incorporation of the Dexis Forensic Software.

In order to obtain adequate access for a thorough clinical examination, there are times when jaw resection (dental autopsy) is indicated. A decision should be made early in the morgue process, preferably at triage. This decision should be multidisciplinary in scope evolving through input from the forensic odontologist, forensic anthropologist, forensic pathologist and funeral director.

Jaw resection is typically indicated for burn victims, decomposed remains or otherwise mutilated remains. This presentation suggests a technique which involves a total mandibulectomy via access from perioral soft tissue excision, low horizontal cervical incision or extension of dissection in a superior direction through a conventional full autopsy incision. A determination can then be made as to whether or not maxillary resection is indicated. If so, a high LeFort I osteotomy is recommended, incorporating a vertical step in the area of the zygomatic buttress to aid in replacing the maxilla as close as possible to its original position.

The above mentioned techniques will facilitate clinical examination and x-ray, while allowing the structures to be replaced to anatomically correct positions should anthropological studies be indicated or the remains be deemed viewable by the funeral director. Flexibility on the part of all concerned disciplines is mandatory.

#### **Mass Fatality Incident, Forensic Dental Identification, Jaw Resection**