



Odontology Section - 2016

G54 Partial Faceoff Dissection in Dental Autopsy

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After attending this presentation, attendees will recognize and facilitate indications for partial facial dissection to preserve identity.

This presentation will impact the forensic science community by demonstrating how examination and reconstitution of dental structures during the course of a dental autopsy may be accomplished without facial disfigurement.

Forensic examination of the teeth and jaws is difficult without adequate exposure. The partial faceoff dissection procedure, which is enhanced by proper jaw removal, permits adequate examination of the mandible and maxilla and enables the replacement of any disturbed anatomical elements to their original visual condition. Forensic photography and radiography are additional benefits of this procedure. The forensic odontologist is often presented with a difficult means of access to the teeth and jaws due to the size or condition of the soft tissues surrounding the oral cavity. Adequate exposure of the teeth is essential for proper charting, photography, and radiography of the teeth during the dental autopsy. During the course of the medical autopsy, it may be advisable to reflect the entire facial soft tissue integument in order to discover previously unknown locations of underlying trauma and still preserve the facial appearance.

Full face removal is not essential for the dental autopsy. This is described in detail by diagrams and during the autopsy. The partial faceoff is a derivative of the full faceoff. This is represented by two actual cases at the time of dental autopsy, and may require the prior approval of the chief medical examiner so as not to interfere with the medical autopsy forensic examination. An initial scalpel cut is initiated on a level just below the zygomatic arch, anterior to the right ear, on a line descendent from the outer canthus of the eye. It proceeds across the cheek to a line inferior to the nares in order to expose the floor of the nasal cavity, and continues to the same area on the left side as on the right. This continuous cut then turns downward toward the inferior border of the mandible, follows a line just above the inferior border of the mandible back to the opposite side, and terminates before cutting superiorly, thus leaving a hinged area on the right side that is the "viewing side."

In cases involving the need to examine the teeth and oral cavity when traditional dissection is not advisable because of the necessity to maintain visual access and preservation of tissue, this dissection may be performed as an alternative to the standard forensic odontological examination to prevent damage or mutilation of the face while still exposing the teeth and oral cavity. Traumatic damage to the teeth and jaws would be revealed before opening the jaws during this procedure. When rigor is still in place, this allows the operator to access the dental apparatus and secure a better opening of the jaws for examination. For further access, it is possible to remove the maxilla and/or mandible for a separate examination outside of the body and to obtain better visualization of all the teeth. Upon completion of the forensic examination, the maxilla and mandible may be returned to their former anatomical positions in order to secure a more complete restoration of the original facial configuration.

Finally, replacement of the dissected portion of tissue is accomplished by returning the hinged flap to its original position and closely approximating the tissue edges. Stabilizing the tissue can be achieved by fine suturing the edges or by applying cyanoacrylate glue along the edges of the incision.

Faceoff, Autopsy, Dental