



## Odontology Section – 2011

### **F47 The Forensic Odontologist Role Beyond Identification and Bitemarks**

*Richard R. Souviron, DDS\*, Miami-Dade County Medical Examiner's Office, Number One on Bob Hope Road, Miami, FL 33136*

After attending this presentation, attendees will learn of the expanding field of forensic odontology beyond identification and bitemarks, will learn age, race, sex and trauma determinations.

This presentation will impact the forensic science community by documenting the effects of dental aging vs. actual age and the relationship to long term neglect, malnutrition, and abuse.

An expanding of the knowledge of forensic dentistry in a shifting of the paradigm to include oral trauma evaluation as to time of injuries. The dental aging of a victim can be documented scientifically to prove the affects of long term malnutrition and starvation.

The forensic odontologist usually works under the direction of the coroner or chief medical examiner and is required to assist with body identification where other means of identification are not possible or practical. Examples of such cases are the obvious-skeletal remains, non-viewable bodies, decomposed, incinerated or mutilated victims. The teeth and oral structures are an accurate, inexpensive and usually rapid means of confirming an identification. In addition the forensic odontologist is called upon to assist in pattern injury interpretation primarily, bitemarks.

There are cases where the odontologist and medical examiner need to think beyond the obvious "think outside the box." A good example of this is the case of "baby lollypop." The body of this child was discovered November 2, 1990 on a trash pile outside a home in Miami Beach. Medical Examiner Case#90-3091 Unk.-W/M. The Medical Examiner called for odontology evaluation not just for dental records but for age estimation, tooth loss pattern, natural or traumatic and an opinion as to oral trauma. This clearly went beyond just dental records for comparison purposes. The victim was subsequently identified as Lazaro Figueroa a 3 year one month old white male. The victim was missing two maxillary deciduous central incisors, the maxillary and mandibular frenums were missing and were replaced with scar tissue. Dental x-rays of the pre molars were compared with dental aging charts. It was determined that this individual was two years of age. Not three years, one month, which was his chronologic age. The dental injuries and dental development assisted the medical examiner and prosecutor to prove to a jury that this

child had suffered from severe malnutrition over a long period and that the traumas had been inflicted periodically over the years.

**Odontology, Paradigm, Dental Aging**