

Letter to the Editor: Support for Thermoplastic Impressions

Dear Editor:

I would like to reply to Dr. John Kenney's "One View " in the *January Illinois Dental News.*ⁱ I have had several communications with Dr. Kenney and other board members about the unreferenced editorial opinion expressed in the ABFO (American Board of Forensic Odontology) position paper on thermoplastic bite impressions. Because the ABFO's mission is to "promote and enhance the science of forensic odontology," and realizing that the ABFO guidelines and standards on bite mark evidence may have failed law enforcement in several high profile cases in the past, it is important to publish this short response to Dr. Kenney's comments.

Thermoplastic bite impressions, like other biometric forensic modalities (i.e., fingerprints, facial and intraoral photographs, dental radiographs, dental chartings and documentation, and study casts), are recommended as an "adjunct" to assist in tracking and identifying deceased or missing children. The bite impressions record the size and shape of the teeth, position of the teeth in the arch, and the relationship of the maxillary and mandibular arches to each other. They also capture saliva for DNA analysis and scent dog tracking. They can be readily digitized.^{*ii*}

I would like to refer Dr. Kenney to the referenced *AAPD Policy Statement on Child Identification Programs* that recognizes the importance of dentistry's role in identification and the use of bite registrations (impressions) as part of the dental record.^{*iii*} This is important as many children nationally may not have access to dental care, have a dental home, receive routine dental care, or have any recent radiographs or restorations on which most dental identifications are based.^{*iv*} Dr, Kenney's awareness of the problem in depending on clinical chartings and dental radiographs for dental identification was best expressed in his earlier statement... "we can't see the margins (of the fillings) as easily with new types of materials, as with old metal fillings.... dentistry is getting too cosmetic; it's too good.^{*vv*} In fact, 40% of tooth-colored dental materials cannot be detected radiographically with a sensitivity that would be demanded for identification purposes.^{*vi*}

The bite impression concept was introduced in Massachusetts at Tufts University in 1985 and was mentored by Dr. Stanley Schwartz, former Massachusetts State Forensic Dentist and past president of the ABFO.^{vii} In Massachusetts alone, over 200,000 children have been "toothprinted" through public and private schools, community programs and dental offices. It is supported locally by the current Massachusetts State Forensic Dentist, the Massachusetts Dental Society, the Massachusetts Crime Prevention Officers Association and nationally by the National Center for Missing and Exploited Children, the American Institute on Domestic Violence, 15 state dental societies, district attorneys, legislators and numerous other law enforcement and philanthropic organizations.

In any challenge of identification, whether it is for a child, a grandchild or a patient, who would not agree that a thermoplastic bite impression would be a much-welcomed biometric tool — even if it helped only one family?

A copy of the referenced "Open Letter" response (dated September 28, 2004) to the ABFO position paper may be requested with any comments to KaneTesini@aol.com.

David A. Tesini, DMD, MS Natick, Massachusetts ⁱ Illinois Dental News Posted Jan. 18, 2005 John P. Kenney, DMD, MS www.ISDS.org

ⁱⁱ Tesini DA, Thompson T. Applications of Digital Images Derived from Toothprints Thermosplastic Bite Impression Wafers J. Mass Dent Society 53(4);26, 2005

iii AAPD. Policy on Child Identification Programs. AM. Acad. Pediatric Dent, Reference Manual 2003-2004

^{iv} www.abfo.org/ID ABFO Body Identification Guidelines, accessed Sept 20, 2004

^v 'Looking for clues in his work as a forensic dentist, John Kenney seeks to give victims back their identity' (NW Edition) Chicago Tribune, Chicago, IL, January 3, 1999 pg. 1

^{vi} Chesne AD, Benthaus S. Brinkman B. Forensic identification value of radiographic images in determining tooth colored dental filling materials. Archive for Kriminolgie 203(3-4);86-90, 1999

^{vii} Tesini DA, O'Malley KD, Schwartz S. Development of Bite Impression Technique for use in Identification of Unknown and Missing Children. J Mass Dent Society 34(2) 1985