



FORENSIC DENTISTRY:

Dentistry and Biотerrorism

Duane E. Spencer, DDS

It has been said the history of forensic dentistry goes back to at least the days of Nero. The story goes that Nero had a woman in his life slain and he identified that it was the correct victim by recognizing a malposed canine in the woman's mouth. In U.S. history, the exhumed body of Gen. Joseph Warren, a prominent Boston physician, was identified by Paul Revere. Gen. Warren was killed in the Battle of Bunker Hill. Paul Revere, a metal-smith, had assisted a London dentist who practiced for a time in Boston. Upon viewing the body, Revere supposedly identified a prosthetic dental appliance he had adjusted for Dr. Warren at one time.

Since the 1960s, forensic dentistry has become more widely utilized, not only in North America but also throughout the world. Forensic dental identifications became more common in the cases of disasters, homicides and other causes of death, as did the analysis of bite mark evidence in criminal cases. The field of forensic dentistry began to expand in the United States as the use and importance of forensic dental evidence became apparent and widespread court acceptance for such evidence was gained. Forensic dental courses became available, such as those at the Armed Forces Institute of Pathology and the University of Texas, San Antonio, among others. Two forensic dental organizations were formed in the 1970s: the American Society of Forensic Odontology, (www.ASFO.org), an entry-level society for those interested in the field of dental forensics, and the American Board of Forensic Odontology, (www.ABFO.org), the certifying board for experienced forensic dentists. In 1991, the California Society of Forensic Dentistry, Inc., was established. The non-profit CSFD is comprised of forensic odontologists who are actively associated with a California coroner's/medical examiner's office or other law enforcement agency.



Author / Duane E. Spencer, DDS, has a private pediatric dental practice in Walnut Creek, Calif. He is a forensic dental consultant to the coroners in Alameda, Contra Costa and San Mateo counties, the California Department of Justice and numerous law enforcement agencies; a fellow of the American Academy of Forensic Sciences, a diplomate of the American Board of Forensic Odontology and a founding member/officer of the California Society of Forensic Dentistry, Inc. He is a frequent presenter to health and law enforcement groups in the fields of forensic odontology and child abuse.



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By its members volunteering their time and experiences in presenting continuing education seminars to California dentists, dental auxiliaries, law enforcement and health professional groups, CSFD has been able to fund forensic research, work to update California's Department of Justice, Missing and Unidentified Persons' database, and contribute to other worthy forensic-related projects.

Although the number of dentists in the United States and Canada working in the field of forensic dentistry is probably in the high hundreds, there currently are only 89 active ABFO diplomates. California is the most well represented state with certified odontologists, currently with 15. Several more experienced California forensic dentists should soon be challenging the ABFO examination.

In recent years, there has been a marked increase in interest not only in forensic dentistry but also in other disciplines of forensic science. Sept. 11, 2001, provided a "wake-up call" to states to create or upgrade their dental identification teams. The media keeps us informed of the involvement of forensics in solving crimes and, of course, there are the television shows such "CSI," "New Detectives" and "Forensic Files," etc. This increased interest in forensics has produced the now common question from dentists, as well as hygienists and assistants, posed to CSFD members, "How can I get involved in forensic dentistry?" As California's county coroners/medical examiners usually have an identified forensic dental consultant and as these consultants keep their positions for a number of years, new positions only open up occasionally. Also, the actual casework in many counties is quite low. This being stated, there is not a large demand for new dental personnel in the forensic field. A den-

tist having a valid interest should contact his/her nearest forensic dental consultant to determine any need for assistance. Financially, forensic dental consulting is not considered a lucrative field and should not be viewed as an endeavor to supplement a dentist's retirement.

This issue of the *Journal* presents the readers with articles on forensic dental identification and a new area of concern to dentists, bioterrorism. The authors include not only well-respected forensic odontologists but also dental educators who are currently very active in the field of dentistry and bioterrorism.

Gerald L. Vale, DDS, MDS, MPH, JD, one of California's most experienced and respected forensic odontologists, presents an article on "Identification By Dental Evidence: Basics and Beyond" in which he discusses not only the fundamentals of dental identification but also other recent developments in the field of identification.

James D. Wood, DDS, was instrumental in the development of the California Dental Identification Team (CalDIT) and was its first director. As the current lead forensic dentist for Region 9 DMORT, who also deployed to New York City to aid in the identification efforts in 2001, Dr. Wood is well qualified to discuss the subject of California dentists and their readiness for a mass fatality incident.

Gregory Golden, DDS, was one of the first forensic odontologists called from out of state to NYC immediately following the World Trade Center disaster. Dr. Golden has written about the early dental identification efforts at the New York Medical Examiner's office in September 2001.

Anthony "Rick" Cardoza, DDS, the current CalDIT director, has authored an article on forensic dental identifications and their importance in the 2003

Southern California Cedar Fire. Drs. Cardoza and Norman "Skip" Sperber, another of California's highly respected odontologists, handled the identification efforts in that tragic disaster.

E. Dianne Rekow, DDS, PhD; Michael C. Alfano, DMD, PhD; and Walter J. Psoter, DDS, PhD, from the New York College of Dentistry, have contributed a valuable article on "Dentists Meeting Medical Surge Demand." What should the role of dentists be when the medical and public health systems have reached their capacities with a catastrophe? New and very important information to the dental reader concerning a subject we did not study in dental school.

Joyce Galligan, RN, DDS, who is on the staff of the University of Southern California, School of Dentistry, has rapidly become one of the lead dentists in California involved in how dentistry might be involved following a bioterrorism attack. Her article, which includes a poster for the reader's office, should be of high interest and importance to all dentists.

Due to the subjects and tragedies discussed in this issue of the *Journal*, I would not expect the reader to necessarily enjoy the articles written by these fine authors, but should find them both interesting and quite informative. The two articles on bioterrorism provide a great deal of new information and ideas for the dental profession. The authors clearly point out that dentistry should step up to the bioterrorism threat and promptly go forward in a responsible direction. As we go through these current, uncertain times in our country and the world, it is important to understand how dentistry is attempting to be prepared; not only for a readiness to identify those who die, but also for that bioterrorist attack we pray never happens. CDA