TECHNIQUES FOR TISSUE EXTRACTION FROM TEETH FOR DNA ANALYSIS

Gilberto Aponte-Machín, DMD, MT and David González Mestre, MT

Advanced DNA Identification Center, San Juan PR



Teeth are an excellent source of tissue for forensic deoxyribonucleic acid (DNA) analyses when other tissue has been burned, decomposed or is otherwise unsuitable. There is ample literature that demonstrates the availability of dental tissue with excellent DNA recovery rates even after being subjected to environmental extremes that preclude DNA analysis from conventional sites, including scorching. A number of techniques are presently used to recover the tissue from teeth, yet the tooth is destroyed in the process. The dentistry techniques here described provide easy access to the tissue within the tooth and preserve the piece for any additional testing that may be required.