Positive identification of a burned body using an implanted orthopedic plate

Rodrigo Ivo Matoso, Eduardo de Novaes Benedicto, Silas Henrique Rabelo de Lima, Felippe Bevilacqua Prado, Eduardo Daruge and Eduardo Daruge Júnior
State University of Campinas, Brazil

Human identification is usually obtained by comparing fingerprints, antemortem and postmortem radiographs, dental records and also by DNA profiling. Sometimes forensic investigators come across some medical appliances such as orthopedic devices. These medical devices may be useful to achieve positive human identification. This paper aims to present a positive identification of a burned human body by tracking batch numbers engraved in an implanted orthopedic device found in the decedent's left ulna bone. The examiners also collected and analyzed other valuable hints related to the case. Forensic examination can provide reliable positive human identification, even if few, but precise information can be obtained from antemortem and postmortem records. The present report illustrates a set of valuable techniques and how identifying numbers in orthopedic devices are helpful to determine positive human identification in cases of carbonization. As seen in this case, the forensic experts used low-cost identification procedures with accurate results, avoiding DNA profiling method that would be of higher cost and time consuming. Considering social and legal aspects, it is quite important that physicians and dentists understand that correct and accurate records of surgeries they perform, such as fixation of orthopedic devices and dental implants, are utterly relevant and helpful in cases of human identification.

Biography
Rodrigo Ivo Matoso has completed his MSc at the age of 35 years from State University of Campinas, São Paulo, Brazil (FOP-UNICAMP). He is the President of the Regional Council of Dentistry of Roraima State, Brazil. He is Forensic Odontologist serving at the Civil Police of Roraima State since August 2004. He was Lieutenant in Brazilian Army from 2002 to 2003. Nowadays, he is a Doctoral student at State University of Campinas, Piracicaba Dental School.

rimatoso@hotmail.com