Thiel embalming technique: a valuable method for teaching oral surgery and implantology.

Abstract:

Because of its high requirements on surgical experience and the need of complete understanding of the anatomy, oral surgery and especially implantology belong to the most demanding procedures in dentistry. Therefore, hands-on courses for oral surgery and implantology are considered a prerequisite to prepare for clinical practice. To achieve teaching conditions as realistic as possible, we used a novel human cadaver embalming method enabling tissue dissection comparable with the living body. Thirty cadavers which were offered by the Institute of Anatomy for the purpose of running oral surgery and implantology courses were embalmed in the technique described by Thiel. On each cadaver, dissection of soft and hard tissue and implantological procedures were performed according to a structured protocol by each course participant. The conservation of fine anatomical structures and the suitability of the embalmed tissue for dissecting, drilling, and suturing were observed and photographically documented. By means of the Thiel embalming technique, oral surgery and implantological procedures could be performed under realistic conditions similar to the living body. Due to the conservation procedure, preparations could be carried out without any time limit, always maintaining the same high quality of the tissue. The maxillary sinus membrane, mucosa, bone, and nerves could be exposed.
and allowed dissecting, drilling, and suturing even after weeks like fresh specimens. The Thiel embalming method is a unique technique which is ideally suited to practice and teach oral surgery and implantology on human material.