

This paper reports the results of dental identification of 1200 human remains exhumed from mass graves in Croatia up to 2000. A total of 989 (82%) victims were positively identified, while 211 (18%) victims remained unidentified. Dental identification based on available dental ante mortem data was achieved in 25% of the cases. Dental identification based on dental charts was achieved in 35%, on x-rays in 15%, on photographs of teeth in 22%, on interviews in 18%, and on dental supports in 10% of the cases. Teeth, in combination with anthropological parameters - age, sex and height as well as with other specific characteristics such as tattoos, personal identification cards, clothes, jewelry and DNA - were helpful for identification of 64% of victims, but their significance for the identification was not dominant. Only in 11% of the cases identification was achieved by other relevant means of identification and teeth were not used at all. Dental findings that were the most significant for the identifications were prosthetic appliances in 30% of cases. Dentures were helpful in the identification of only 1% of the cases, while crowns and bridges were helpful in 29% of the cases. Non marked full dentures caused problems in the determination of identification.

10. Effectiveness of Sports Mouthguards

Jagger RG.

*Dental School, University of Wales College of
Medicine, Cardiff, UK*

Participants in a wide variety of sports commonly experience orofacial injuries. Dentists have a responsibility for both the treatment and prevention of these injuries.

Equipment for the protection of the face and mouth includes facemasks and mouthguards.

There are three broad categories of mouthguards:

- Type 1 (Stock) mouthguards are purchased over the counter at sports shops;
- Type 2 (Mouth-formed) mouthguards are purchased in the same way but are modified in the mouth to improve fit;
- Type 3 (Custom-made) mouthguards are made in the laboratory on casts made from impressions of the mouth.

Evidence suggests that mouthguards can help prevent damage to soft tissues and teeth and possibly prevent concussion. Custom-made mouthguards are the most

retentive and are best tolerated. Incidents have been recorded when ill-fitting mouthguards have been dislodged and blocked the airway

Many claims have been made regarding the relative effectiveness of different types of mouthguards. The evidence for the relative effectiveness of different mouthguard materials and designs will be described. The available data from *in-vitro* and *in-vivo* investigations must be interpreted with caution

There is a need for further scientific research to develop optimum protection for participants in sports.

11. Clinical and Laboratory Techniques for the Custom-Fabrication of Athletic Mouthguards

Ranalli DN.

*Department of Pediatric Dentistry, School of Dental
Medicine University of Pittsburgh, Pittsburgh, PA. USA*

The efficacy of mouthguards for preventing sports-related traumatic oral injuries is well documented in those sports that mandate their use. There are three general categories of athletic mouthguards that currently are available. These include stock, mouth-formed and custom fabricated mouthguards made over a dental cast. Most mouthguards in each of these categories are made from ethylene vinyl acetate (EVA) material. Fabrication and design require professional services for impression taking and laboratory processing. Custom-fabricated mouthguards are, therefore, the most retentive. This presentation is designed to describe, in detail, clinical and laboratory procedures that are used to fabricate custom athletic mouthguards and will include the vacuum-forming technique and the heat-pressure-lamination technique. Information on a new vacuum-pressure-lamination technique will be described as well as an experimental technique that utilizes photopolymerized urethane diacrylate. Several research topics for future investigation will be identified.

12. Denture Repairs: Surveys, Methods and Trends

Polyzois G.

*Department of Removable Prosthodontics, Dental
School, University of Athens, Athens, Greece*