CONTEXT

Sports dentistry is a field specializing on oral health-related issues for people of all ages who engage in sports, including their exposure to trauma and lacerations. Amateur athletes are more at risk of dental injuries, because they do not receive proper guidance and/or training. Although the indication of customized types of mouthguards has increased, there is a need to further specify the sport characteristic, age group, selected material, guard design, as well as time of use. Current evidence also shows that mouthguards may lose efficiency over time, due to use and a lack of periodic control.

Injuries, facial bone fractures and brain concussions should receive special attention, as sports-related blows may carry a considerable amount of energy. Ball disputes with projection of the body and consequent head and/or elbow contact completely change the impact received on the facial bone structure. Face shields, or customized masks made of scientifically determined cushioning materials, are successfully applied and may be indicated for post-fracture use to reduce recovery time for the athlete. Customized sports mouthguards and face shields manufactured under the supervision of a dentist, should be favoured instead of commercially available pre-sized guards.

There is also a need to increase awareness of the potential indirect ‘doping’ effects of dental prescriptions, as certain drugs widely indicated in dentistry may be transformed into highly doping substances. For example, codeine-containing drugs are not prohibited by the World Anti-Doping Agency (WADA). However, when they enter the body, these drugs are transformed into morphine, which is prohibited. There are also substances in the body that, when decompensated due to functional deterioration, can promote reactions and indirectly affect the athlete’s oral health. Some dental problems, such as carious cervical lesions or caries, may also come from over training due to an unfavourable diet and parafunctional load.

For additional consideration, energy drinks and related products ingested in the form of liquids, or food supplements, can cause significant complications in the oral environment due to high content of free sugars and acidic ingredients. All aspects of an athlete’s oral and general health may affect performance and should be addressed.

SCOPE

This policy statement provides information about the global situation of sports dentistry and the role of dentists in the health of athletes.
DEFINITIONS

Sports dentistry is the branch of sports medicine dealing with prevention and treatment of dental injuries and oral diseases associated with sports and exercise.

PRINCIPLES

This policy statement contributes to FDI's aims to improve the oral health of athletes, as well as systemic and psychological health, increasing safety in sports practice. Moreover, having dentists present in high performance sport teams is an important measure to ensure athletes' maxillofacial health, through preventive and curative action.

POLICY

FDI recommends to:

- Reinforce the importance of customized mouthguards, shock-absorbing material, and time of use.
- Introduce the indication of customized face masks and shields, made by dentists or under dental professional supervision.
- Update the dental team on the metabolism of prescribed substances in potential conflict with WADA regulations.
- State the importance of an athlete’s oral health status to their performance and the manifestation of oral lesions related to systemic reactions derived from sports conditions.
- Reinforce the importance of the relationship between an athlete’s oral and general health.
- Promote the benefits of well-balanced diets for good oral health versus the risks of high free sugars content and acidic foods and drinks.

DISCLAIMER

The information in this Policy Statement was based on the best scientific evidence available at the time. It may be interpreted to reflect prevailing cultural sensitivities and socio-economic constraints.

REFERENCES

3. Coto, NP; Driemeier, L; Roveri, GO; Meira JBC; Dias RB; Noritomi, PY. Numerical study of the face bone behaviour when impacted by rigid ball. J Biomech 2012 Jul; 45:1121-1121.


