FDI POLICY STATEMENT

Prevention in Sports Dentistry

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CONTEXT

Around the world, more and more people participate in sports for both leisure and as a profession.

The development of sports medicine has contributed to healthier athletes and better performance. Sports medicine has also evolved into a multidisciplinary field in which sports dentistry is a key element.

Some dental problems, such as non-carious cervical lesions, caries or periodontal diseases, may arise from training, an unfavourable diet in terms of oral health, a parafunctional load or poor oral hygiene. Acidic sports beverages and related products ingested at high frequency in the form of liquids, gels, carbohydrate mouth rinses or food supplements can also cause complications in the oral environment, including damage to dental hard tissues and dental materials, due to their high content of free sugars and acidic ingredients[1].

In addition, amateur and elite athletes face a greater risk of oral injuries when they are participating in combat or contact sports without proper protection[2,3]. Between 10 and 61 percent of athletes experience dental trauma during their sports activity and amateur athletes are more prone to suffer from sports-related injuries than elite athletes[4]. Finally, there is a need to increase awareness of the potential impact of dental prescriptions as certain medications may metabolize producing substances prohibited by anti-doping regulations.

Oral and general health are connected. The mouth is often considered as a mirror of the body: only a healthy mouth will allow an athlete's body to perform in the most efficient manner[5]. Conversely, an unhealthy mouth can affect quality of life, wellbeing and performance in several significant ways. For example, tooth decay and gum disease can cause or maintain inflammation or infections in the body[6,7]. Some researchers consider that dental malocclusion may affect posture and gait. This may subsequently impact on performance and injury risk, although evidence of these impacts is still limited and further research is needed[8]. A dental emergency before a competition can impair performance or even prevent participation entirely.

SCOPE

This policy statement aims to provide information to promote the integration of oral care into sports medicine, to stress the importance for all athletes of achieving and maintaining optimal oral health as well as to emphasize the role of dentists in oral health care and prevention.

DEFINITIONS

Sports Dentistry: an interest area of dentistry dealing with the promotion of oral health in sports, prevention and treatment of pathologies and injuries of the stomatognathic system related to sports and exercise.

Stomatognathic system: The anatomical and functional system comprising the teeth, jaws, associated soft tissues, facial muscles and temporomandibular joint (TMJ).

PRINCIPLES

Microbial or functional stomatognathic pathologies are often preventable. Therefore, promoting oral health and good oral hygiene practices in the earliest stages of sports practice (e.g. in school, grassroots clubs and sports academies) is essential.

Regular dental or oral health screenings integrated with general health assessments of both elite and amateur athletes, no matter their skill level or classification, are highly valuable as early detection of any oral issue can be fostered.

POLICY

FDI has the following recommendations for sports organizations:

- Communicate the high evidence for the relationship between oral health and general health to all their members, from the most junior to the most senior;
- Communicate the importance of good oral health in order to maintain athletes' overall health and wellbeing;
- Encourage school children, amateur and elite athletes to adopt healthy oral hygiene, nutrition, hydration, regular dental check-ups and injury prevention behaviours;
- Encourage collaboration among sports clubs, federations, institutions and sports medicine centres at local, national, regional and international levels to promote prevention, research, surveillance and monitoring of oral health and related health factors, and to support education in the field of sports and dentistry;
- Stimulate interactions between their medical staff and dentists by encouraging regular medical and dental check-ups among their members/athletes;
- Initiate common strategies with national and international sports federations, foster the integration of sports dentistry into sports medicine and incorporate dentists as members of sports medical team.

FDI recommends that dentists and sports physicians:

- include questions related to the type of sports their patients are practising and how often in the medical questionnaire
- inform all athletes, elite or amateur, about the importance of good oral health for optimum performance, about the impact of sports on oral health and about the relationship between oral health and general health;
- collaborate when managing an athlete's health;
- include oral health as part of the athlete's general health check-up and ensure they seek appropriate dental care;
- systematically provide advice on prevention to all athletes, including oral

hygiene and preventive measures, benefits of well-balanced diets, knowledge of the acidity of sports drinks and risk to oral health, regular oral health check-ups, good nutrition, appropriate hydration, the use of customized mouthguards when participating in contact or combat sports and the detriments of alcohol, tobacco consumption and;

- regularly update their knowledge of the metabolism of prescribed medicines and potential interactions that may result in the athlete's non-compliance with the World Anti-Doping Agency regulation.

FDI recommends that all athletes (amateur and elite):

- wear a custom-made mouthguard when engaging in contact and combat sports, even if only participating in the sport occasionally;
- understand that poorly fitting mouthguards offer poor protection;
- avoid consequences of sports activities on their oral health by following specific recommendations of oral health professionals.

KEYWORDS
Sports dentistry, sports medicine, oral hygiene, oral health, healthy mouth, stomatognathic system, custom-made mouthguard

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.

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