

A Clinical Innovation

Awareness Regarding Use of Sports Guard

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Abstract

Thousands of injuries on the playing field, while biking and during other activities are experienced by teens and adults. In nearly every sport, injuries to the face can harm teeth, lips, cheeks and tongue. Hence to protect teeth and smile a properly fitted mouth protector is important. This article gives a brief review on the importance of mouth guards to be used to protect smile.

Keywords: Awareness, dental trauma, mouth guards, sportspersons

INTRODUCTION

Most of the dental injuries are reported in the field of sports and particularly contact sports involving up to 19% of head and face injuries and approximately 33% dental injuries. Hence the ones who are at greater risk for dental and oral injuries are children, adolescents, professionals, and amateurs who participate in these contact sports.¹ Therefore to reduce such outcomes, it is important to provide immediate emergency care.² Significant consequences to various health-related aspects and subsequently on daily life can occur due to dental trauma.³

From a minor injury of enamel chip to major injuries such as maxillofacial injuries and displacement of teeth, dental injury can vary.⁴ Almost 35% of children and adolescents suffer accidents involving front tooth of upper jaw and crown fractures which are frequent dental sports injury.¹ It might lead to the reduction in the pulp vitality if the treatment for traumatized teeth is delayed and it cannot be regained back.⁵

Dental injuries can be classified by etiology, anatomy, pathology or therapeutic considerations as extrusion, intrusion and tooth avulsion, whereas in the dental office tooth avulsion is the most frequent types of dental trauma that we see. To avoid further damage to periodontal membrane it should be replanted as soon as possible. For a successful outcome of these incidents the transport and care of the affected tooth, the prompt and adequate treatment in dental office, as well as the proper follow-up are imperative.⁶

Most dental sports accidents would be less serious or even avoided if mouth guards were worn but severe dental injury requires extensive therapy and incurs substantial treatment costs.⁷ The use of mouth guards has long been compulsory in the United States for junior teams in high-risk sports such as American football and ice hockey (Bureau of Dental Health Education, 1963). However, mouth guards are uncommon in most countries, as they are used on a voluntary basis, which is most common in our country also. Therefore, it is important to determine the behavior of this group toward the use of mouth guards with regard to their safety and promotion.⁸

Hence, in this article attempt is done to know the awareness of sports persons about dental trauma and its prevention and management.

DISCUSSION

Dental and orofacial injuries and dental accidents due to sports often have lifelong consequences. Activities that increase the risks of blows and falls, these complications can be avoided with adequate educational and preventive measures, such as use of mouth guards. National dental association informs the public and oral health-care professionals of the benefits of sports mouth guards which is recommended by the World Dental Federation.⁹

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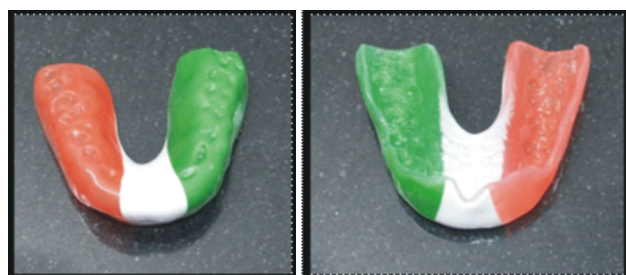


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Perunski et al.⁷ conducted a study which showed sports persons with dental injury is 30.8% and sports persons with sustained dental injury is 16.6%. The prevalence is higher due to the limited use of mouth guards. A study conducted by Tiwari et al.,¹⁰ in central India showed the lack of awareness about mouth guards among sports persons as only 41% of sports persons uses mouth guards.

Reasons for not wearing mouth guards when asked to sports persons were the same as stated in many similar to other studies and among them the most common reason was difficulty during speech (39.5%) , unavailability of mouth guards, improper fit of mouth guards and various other reasons, which was similar to a study conducted by Perunski et al.,⁷ who showed around 40% of sports persons for not using mouth guards is difficulty of speech. However, these are purely subjective feelings as athletes often link them as irritating factors which has negative influence on their performance. But majority of surveys show that wearing an exactly fitting mouth guard does not reduce the performance of the athletes only impairs breathing in an insignificant manner.^{11,12} These days players should prefer to wear custom-made mouth guards because of their high degree of comfort and acceptance.

Bolhuis et al.⁸ conducted a study which showed that the ratio of subjects who had got mouth guards from a dentist is 77% and the other who got it from a sports shop or elsewhere is 23%. The players and coaches should be given information about obtaining the mouth guards from the dentist and the benefits of custom-made mouth guards which is more comfortable and acceptable than prefabricated mouth guards.



Custom-made Mouth guard

In case of trauma it is extremely important to know about prevention and appropriate emergency intervention. Neeraja et al.¹³ conducted a study where 48% of study subjects were aware of replanting an avulsed tooth and this could be due to the interactions with dental experts by some sports persons during their training period.

Mesgarzadeh et al.,³ conducted a study where 38% used tap water and 33.3% used milk as storage medium. Even though tap water is not an ideal option to be used as a storage medium, it is good to see at least before visiting to nearby hospital, they had an awareness to store their avulsed tooth in a storage medium.

Hence the population thinks awareness about dental injuries and its safety measures is necessary for every sports person. So, with the support of dentists and public health professionals, the risks of orofacial injury should be made known to sports persons including players and coaches. Sports governing bodies and major games organizing committees should give more information about the avulsed tooth and its management and should encourage to work with dental hospitals and colleges in taking a more active role in promoting programs so to prevent oral injury and disease and in requiring mandatory mouth guard use.

CONCLUSION

In the article it is concluded that knowledge alone, on the use of mouth guard, does not ensure its practical usage of mouth guards. The majority of sports persons were aware about the incidence of dental injuries and orofacial protective devices and interactions with medical or dental experts for prevention of dental injuries were mandatory for them. But still they lack information about professionally fitted mouth guards, the source of its availability, cost of the mouth guard and the inconvenience of wearing one are less significant than the benefits of wearing it.

As dental professionals we should motivate the sports persons for the use of protective devices to prevent dental injuries and should take necessary steps to improve the awareness of dental trauma.

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