

Prevalence of Sports Related Oral Injuries and Use of Mouth-Guards: A Mini Review



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Received: June 19, 2018; Published: June 22, 2018

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Abstract

Oral injuries can cause disfigurement after healing to sufferer that might affect the athlete's quality of life. It is important that athletes should be aware of how they are at risk for dental and soft-tissue injuries and prevention of such injuries can be achieved if they utilized mouth-guards during sport activities. This article reviews the prevalence of sports related oral injuries and importance of mouth-guards in preventing these injuries.

Introduction

People engaged in frivolous and competitive sports activities for both physical and psychological well-being. Unfortunately, participating in sports activities is at risk of sustaining trauma to the oral hard and/or soft tissues such as chipped, luxated or avulsed teeth, maxillary or mandibular fractures, lip lacerations and other injuries to the gingivae, tongue or mucosa [1]. Hard and soft-tissue injuries are common; not only to high-risk contact sports such as boxing, hockey, rugby and lacrosse, but also to other, less obviously hazardous sports (for instance basketball and baseball) and non-contact activities (for instance gymnastics and in-line skating) [2]. Study performed among Nigerian young adult athletes, contact sports accounted for 78.5% of the oral injuries, while only 21.5% were resulted from non-contact sports [3]. Athletes participating in martial arts which are one of the contact sports suffered the highest injury rate (41.5%), than athletes participating in ball sports (17.2%) and other non-contact sports (15.2%) [4].

Sports-related dental injuries account for 13% to 39% of all trauma cases in Germany [5]. The prevalence of dental trauma among Pan American games athletes was 49.6%, where 63.6% of them were related to activities during training or competition [6]. In the Czech Republic, the most frequent causes of injured permanent teeth in patients older than 11 years were sport activities [7]. The risk of oral injuries during performing sports and exercise activities can be reduced markedly by using mouth guards [8]. It offer protection by untying the cheeks and lips from the teeth, making users less vulnerable to soft-tissue laceration and preventing opposing arches from traumatic contact and these protective devices

provide a resilient, protective surface to distribute and dissipate transmitted forces on impact.

Studies have been done on wearing mouth guards and occurrence of dental injuries. Basketball players who use mouth guards had significantly lower rates of dental injuries and dentist referrals [9]. A Nigerian study also showed that prevalence of orofacial injuries was significantly lower while wearing a mouth guard [10]. A survey in Switzerland, Germany and France found only one individual among all of squash players who experienced dental traumas wore a mouth guard [11]. The importance of utilizing mouth guard was found in one Turkish study where 13.2% of university athletes had suffered from one or more form of oral injury while not wearing mouth guards [12].

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