

The Risks of Dental Veneers (when poorly executed) and High-Performance Soccer Players

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Not all Brazilians like football! There are two of us Brazilians who, despite liking and playing sports, might be excluded from the great hall of fans. So there is no idolisation, either of football or of people related to football.

Not all Brazilians like soccer! We are two Brazilians who, although we enjoy and practice sports, may be excluded from the vast group of soccer fans. Therefore, there is no idolatry, neither toward soccer, nor regarding anyone associated with soccer.

Due to the power and breadth of the internet and globalisation, footballers end up becoming influencers. They launch fashion! And fashion is not always interesting!

Currently, the majority of footballers wear contact lenses. Considering the current Brazilian football team, of the 22 players in the squad, 11 wear contact lenses.

Contact lenses (made of resin or porcelain) are fragments that are cemented or fabricated onto dental structures, usually on the buccal surfaces of upper and lower teeth. When poorly executed, due to excess material in the cervical region of the teeth, they can initiate, exacerbate or progress periodontal diseases (gingivitis and periodontitis). If left untreated, periodontitis, which causes bone loss, can lead to tooth loss¹⁻⁵. Unfortunately, it is not uncommon for patients to seek lenses instead of orthodontic treatment when there is a malocclusion, such as crossbite, severe crowding or Angle Class II or III skeletal problems. The manufacture of lenses in these cases can also jeopardise the functions of the stomatognathic system, as well as breathing, phonation, posture, etc [1, 2]. Orthodontic treatment should be started early, even in childhood, in order to achieve better results in adulthood.

The relationship between oral health and the physical performance of high-performance athletes has been studied. Oral diseases such as tooth decay, dental erosion and periodontal disease have shown a high prevalence in high-performance athletes [6-10]. Due to their young age, complications resulting from wisdom teeth have also been reported [7]. The hypothesis raised was that poor oral health may be associated with limited and poor self-reported performance and physical fitness [6-13].

Hoppe et al. [12] (2017) observed a statistically significant association between pocket probing depth, clinical attachment loss and chronic oral inflammatory load and low physical fitness in male military personnel in the standardised physical fitness test.

Gallagher et al. [8] (2018) reported that 32% of British athletes had an oral health-related impact on sports performance: difficulties in participating in training and competition caused by oral pain. Additionally, difficulties in eating (34.6%), relaxing (15.1%) and smiling (17.2%) were reported.

Botelho et al. [13] (2021) observed an alarming prevalence of periodontitis and perimplantitis of 40.9% in professional football players. A significant moderate correlation was observed between clinical attachment loss, periodontal pocket depth and periodontal epithelial surface area and the percentage of fat mass, muscle mass, muscle mass index and total fat folds.

This association between oral diseases, and more particularly periodontal diseases, and systemic diseases is also studied by Periodontal Medicine, a science that determines periodontal infections as aetiopathogenic factors of systemic conditions or diseases. Periodontal Medicine was proposed by Rush and Hunter in their Theory of Focal Infection at the beginning of the 19th century. However, in the Ancient Ages, Hippocrates already hypothesised this theory [14]. Thus, periodontal infections can be risk factors for cardiological changes (myocardial infarction; infective endocarditis; atherosclerosis); neurological changes (stroke); obstetric complications (premature birth and low birth weight); pulmonary conditions and diseases (aspiration pneumonia; COPD; pulmonary empyemas and abscesses; pulmonary emphysema); diabetes; osteopenia; alopecia; among other pathologies and conditions [14].

Considering the evolution of dental science, the evolution of human conscience and, above all, the concepts of Sports Dentistry, the Football Committees and Confederations (of each country) should preventively advise athletes not to have these clinical procedures carried out, since, if done incorrectly, they can cause stomatological and perhaps systemic diseases, and subsequently restrict sporting performance. From this perspective, once the procedures have been carried out on the athletes, the team of dental surgeons should proceed with the efficient diagnosis, planning and execution of dental treatment for the control and preservation of oral diseases. Dental lenses must be made with excellence. When not properly made, dental lenses associated with malocclusion problems can worsen cases, from the evolution of periodontal problems, occlusal trauma and subsequently dental problems.

In Brazil, our study group is researching the deleterious characteristics of dental lenses when poorly made, including the subsequent judicial aspects, which can be easily ascertained in forensic dental examinations [1-5].

References

1. Pedron IG and Cavalcanti RR. "Forensic Dentistry and the identification of the iatrogenic lesion in the patient in vivo". SAODS 5.5 (2022): 19-21.
2. Lourenço D and Pedron IG. "Orthodontic changes resulting from the application of dental contact lenses or laminate veneers". SAODS 6.2 (2023): 01-04.
3. Pedron IG. "Dental Forensics due to Dental Error". SVOA Dentistry 5.2 (2024): 62-64.
4. Pedron IG and Maia MLP. "Forensic Dentistry - Dental Expertise in Civil Lawsuits". Medicon Medical Sciences 6.5 (2024): 42-49.
5. Pedron IG. "Forensic Dental Medicine - stomatological expertise in civil actions". Maxillaris Portugal Magazine 19.135 (2024): 30-33.
6. Wakai K., et al. "Associations of medical status and physical fitness with periodontal disease". J Clin Periodontol 26.10 (1999): 664-672.
7. Ashley P., et al. "Oral health of elite athletes and association with performance: A Systematic Review". Br J Sports Med 49.1 (2015): 14-19.
8. Gallagher J., et al. "Oral health and performance impacts in elite and professional athletes". Community Dent Oral Epidemiol 46.6 (2018): 563-568.
9. Schulze A and Busse M. "Sports diet and oral health in athletes: a Comprehensive Review". Medicina (Kaunas) 60.2 (2024): 319.
10. Ferreira RO., et al. "Periodontal disease and sports performance: A Systematic Review and Meta-Analysis". Res Sports Med 32.5 (2024): 767-786.
11. Oliveira JAP., et al. "Periodontal disease as a risk indicator for poor physical fitness: a cross-sectional observational study". J Periodontol 86.1 (2015): 44-52.
12. Hoppe CB., et al. "Association between chronic oral inflammatory burden and physical fitness in males: a cross-sectional observational study". Int Endod J 50.8 (2017): 740-749.

13. Botelho J., et al. "Periodontal health, nutrition and anthropometry in professional footballers: A Preliminary Study". *Nutrients* 13.6 (2021): 1792.
14. Pedron IG. Comments on "Review of the association between periodontitis and chronic obstructive pulmonary disease in smokers". *Monaldi Arch Chest Dis* 89.1 (2019).

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