Item Type: Original Item
Received: 07/06/2021
Accepted: 12/10/2021

Piercings oral: a health challenge on athletes in Villa Clara

Abstract

In the province of Villa Clara, there is evidence of an increase in the use of piercing in the oral cavity in athletes, which arouses the interest of the professionals of the Provincial Center of Sports Medicine, due to the alterations to health that the use of this garment can cause . The objective of the research is: to characterize the behavior of the use of intraoral piercing in athletes of the Comprehensive School of School Sports "Héctor Ruiz Pérez" of Villa Clara. A descriptive cross-sectional study is carried out, in the period from September 2017 to January 2019. The universe of study is made up of 237 combat sports athletes who attend a dentistry consultation for their check-up, of which 136 constitute the sample. selected through the simple random method. The main results that can be seen are the most frequent harmful effects such as gingivitis, followed by dental trauma and gingival recession. It is found that the use of piercing in the oral cavity in the athletes studied is characterized by occurring more frequently in the ages between 15 and 18 years, with a predominance of the female sex and the harmful effect that most affects is gingivitis. periodontal, followed by dental fractures and gingival recessions.

Keywords: piercing, oral health, athletes.

Introduction

Currently, among all the diseases that affect the oral complex, according to Córdova, Calzadilla and Aguilera (2019), there are dental traumas that are alterations caused by extrinsic and intrinsic factors that hinder its normal functioning.

In recent years, a new form of behavior has appeared that fundamentally affects a significant number of adolescents and young people in society; is the use of body piercings.

However, the use of these garments on the tongue and lips are currently gaining popularity among the youth population in general, and Cuban youth are not exempt from these trends, which have repercussions on the general health of the individual, mainly the oral health (Castro, Mattos and del Castillo, 2018)

At the moment, the practice of this type of body art in adolescents is a fact that has been acquiring the character of a social problem due to everything that it carries in itself. In Cuba this phenomenon did not monopolize the space or the attention that today it has among adolescents, which at present has been increasing and with it a whole series of implicit complications. (Does, Cardentey, Diaz, Sacerio and Calero, 2014)

In Cuba, at the "Héctor Ruiz Pérez" Comprehensive School of School Sports (EIDE) in Villa Clara, the occurrence of this event has also captivated the attention of the athletes and the great social acceptance of the phenomenon requires a guiding process.

In said school, this form of social behavior has gained ground in a spectacular way among athletes, without ignoring that the wearers of these garments are reluctant to remove them in training and competitions, the occurrence of this phenomenon is of interest to stomatologists due to the series of alterations to health in general and to the development and performance as an athlete, which can cause the use of this garment, not to mention that any stomatological treatment derived from complications due to its placement, no matter how minor, requires human and material resources expensive for the country, hours are needed to do the restorative and reconstructive phase, time that would also be subtracted from the athlete's sports life.

Therefore, it is vitally important to draw educational strategies through sports coaches, the medical triad, dental care graduates and dentists, to avoid the use of oral piercing, disseminating the negative consequences it can bring to the health of athletes. and their sports performance, their placement and use, as well as the appropriate treatment to improve their quality of life.

Given the absence of research on this topic in the Provincial EIDE of Villa Clara, due to the importance it acquires and taking into account the considerable increase in its use in Villa Clara athletes, the following objective of the research is established: to characterize the behavior of the use of intraoral piercing in the athletes of the "EIDE Héctor Ruiz Pérez" of Villa Clara.

Material and method

A descriptive cross-sectional study was carried out at the EIDE "Héctor Ruiz Pérez" in Villa Clara in the period from September 2017 to January 2019. The universe of study was made up of the 237 combat sports athletes who attended a consultation. stomatology for the initial check-up, of which 136 constituted the selected sample between the ages of 12 and 18, through the simple random method.

As methods were used:

Observation: in the oral clinical examination, the classification set was performed using the dental chair, their clinical history was prepared taking into account the different parameters necessary for the study of the behavior of the variables such as age, sex.

The love index: it was performed to determine the presence of gingivitis and, to identify dental trauma, the Ingeborg Jacobsen classification of the year 2010 was used.

Statistical-mathematical: empirical distribution of frequencies, with the primary data a database was formed, as a summary measure for the qualitative variables the absolute number and the percentage were used.

Interview: with the objective of verifying if the athletes are aware of the consequences that the use of intraoral piercings can bring them in their training and competitions.

Results and Discussion

As a result of the investigation, it was found that of 136 athletes examined in consultation, 15 presented intraoral perforations (11.02%), of them 12 females (80%) and three males (20%); the age where the greatest use of piercing was found was between 15 and 18 years with nine athletes, for 60% and only six in the ages of 12 to 14 years, representing 40%; the most frequent alterations found were gingivitis with eight affected athletes (53.40%) followed by dental trauma with four athletes (26.6%) and gingival resection with three affected, 20% of the sample.

The increase in the practice of adolescents in the use of intraoral piercing is evident, a phenomenon that corresponds to the results shown by a study carried out on pre-university students in the Plaza de la Revolución municipality, finding that at least 70% of adolescents studied have been carriers of this garment (Fernández, 2019).

Coinciding with the results of this research, it was observed that the highest percentage of the population studied by Haces et al (2014) also used piercing in the oral cavity.

Table 1. Distribution of athletes who use intraoral piercing by age.

age range	quantity	%
12-14	**6**	**40**
15-18	**9**	**60**
Total	**15**	**100**

Source: medical records

Table No.1 shows that the largest number of athletes who use piercing in the oral cavity are in the ages between 15-18 years (60%) while the age group of 12-14 years only six athletes make use of this garment for 40%. This result coincides with Fernández (2019) who also found an increase in the use of piercing in this age group.

Table 2. Distribution of athletes who use intraoral piercing according to sex.

scale by sex	quantity	%
Male	**3**	**20**
Female	**12**	**80**
Total	**15**	**100**

Source: medical records

Table No.2 shows the distribution by sex where females predominate with 12 athletes (80%), this coincides with Fernández (2019), finding that every day more women insert these garments on their faces and bodies to adorn themselves, beautify themselves. and be fashionable and as a sign of distinction or belonging to a group. However, this result differs from that found by Haces et al (2014) in their study, where they state that 70% of men use intraoral piercing.

This difference that exists in the prevalence of the use of piercing in females over males is given in most cases because females at this stage tend to be more striking, in addition to pretending to imitate some artists or singers, a fact that demonstrates who do not warn of the danger to which they are exposed by following certain fashions or trends (Fernández, 2019).

Table 3. Distribution of athletes according to the harmful effect of piercing.

Harmful effects scale	quantity	%
Gingivitis	**8**	**53,40**
dental trauma	**4**	26,60
gum recession	**3**	**20,0**
Total	**15**	**100,0**

Source: medical records

Table No.3 shows the distribution of athletes according to the most frequent harmful effect, gingivitis or inflammation of the gums with eight affected athletes, 53.40% of the sample. The results coincide with those obtained in a study carried out in a group of adolescents from the Sanjuanero municipality of Pinar del Rio (Haces et al, 2014).

Other authors such as Ardila and Guzmán (2009) also agree in stating that persistent local irritants injure the tissue, prolong the inflammation causing vascular permeability and exudation at the same time, however, in the constant cellular regeneration of the organism, they repair the tissues to the same extent. damaged, affecting the color, texture and size of the structures involved such as the gums, characterized by pain, redness, inflammation, sensitivity and bleeding.

The placement of a piercing in the oral cavity can cause accumulations of plaque and supragingival and infragingival calculus in lower anterior teeth due to the fact that oral hygiene cannot be carried out correctly due to the presence of these attachments (Fornes, Díez and Sierra, 2012). This aspect also coincides with other authors who assume that these factors precede the appearance of periodontal disease (gingivitis). (Fariñas, 2018)

Tooth fracture was another of the harmful effects caused by the use of intraoral piercing in this sample that also practice combat sports, which requires greater physical contact between athletes and greater violence in its practice; 26.6% presented this affectation, these results coincide with Haces et al (2014) who point out that dental fractures are frequent injuries described by the use of this garment since contact with the piercing can break the tooth in the same way the tooth can be damaged if you have a restoration and the earring hits it.
It agrees with other authors who point out that dental trauma and fractures are the most frequent injuries described by the use of oral piercings. The habit of pushing and playing with this garment against the teeth, or simply the fact of having a foreign object in the mouth can cause fractures, fissures, abrasions or detachment of enamel spicules causing, especially if there is pulp involvement, sensitivities to substances cold or sweet and the appearance of pain when exerting pressure on the affected tooth (Jiménez, Córdova and Gutiérrez, 2015).
Another harmful effect observed in the study was gingival recession that affected 20% of the total sample, this consists of the apical displacement of the soft tissue of the gum towards the cement-enamel junction, which exposes the root surface, in accordance with Ardila and Guzmán (2009) when stating that it has been found that the use of piercing in the oral cavity causes a high prevalence of damage to the gingival tissue.

In addition to these harmful effects that are described in the research, some others can also be mentioned that can accompany the placement and use of intraoral piercing immediately or late, such as:

Pain: Due to inflammation or ulceration of the tissues surrounding the wound caused by the piercing, it causes pain. Inflammation and pain are in fact the most frequent complications, according to Ravelo (2016). The time required for symptoms to completely subside after a lingual piercing is estimated at between three and five weeks.

Bacteremia: Following recent placement, medical attention should be sought if symptoms of bacteremia such as fever, chills, tremors, and redness around the piercing occur.
Inflammation: Six or eight hours after a tongue piercing, the surrounding tissues begin to swell, increasing the process during the following three or four days. The submental and submandibular nodes may also be enlarged by the inflammatory process.
Tears: It occurs mainly in facial piercings during the placement of clothing, with the friction of objects incidentally and in lingual piercings due to the movements of the same. (Fariñas, 2018)
Disease transmission: A small number of cases of fulminant hepatitis have been described after the placement of piercings, however, there are few studies that confirm the risk of transmission of diseases related to this practice. The infection could potentially be due to poor hygiene, poorly sterilized instruments or poor isolation from the local field, in centers where tattoos are normally also performed. Viruses such as HIV, hepatitis B, C, herpes simplex, Epstein-Barr, candida infections or bacteria such as tetanus, pseudomonas, staphylococci aureus, streptococci, etc. could be transmitted. (Jiménez et al, 2015)
It was found in the interviews that 100% of the athletes are not aware of the negative consequences that the use of piercings can bring to their oral health; 75% consider that the use of this garment in training or competitions is not a problem; All (100%) consider that even being athletes, the use of piercings favors them from the aesthetic point of view, so it is corroborated that they are unaware of the negative consequences of the use of said garment for their oral health and other consequences that it can cause in the trainings.

CONCLUSIONS

The use of piercing in the oral cavity of the athletes studied was characterized by being more frequent between the ages of 15 and 18, with a predominance of females.
The harmful effect that most affected was periodontal gingivitis, followed by dental fractures and gingival recession in the athletes studied.

REFERENCES

Squirrel, C; Guzman, I. (2009). Association between tongue piercing and gingival recession. Havana Journal of Medical Sciences; 8(4).

Clavería R, Moncada C, Fouces Y, Tabares R, Muñoz Y (2009). Watch out for mouth piercings! 2009. MEDISAN; 13(3).
Castro, Mattos and del Castillo (2018). Considerations in scientific writing: the title, abstract and keywords. Odontol. Sanmarquina, Peru. Online ISSN: 1609-8617. Volume 21, Number 8. 57-61http://dx.doi.org/10.15381/os.v21i1.14414
Cordova, Calzadilla, and Aguilera (2019). Behavior of dental trauma in the anterior sector in patients from eight to 18 years of age. Rev Arch Med Camagüey, volume 23, number 4, 2019. ISSN: 1025-0255. http://magazineamc.sld.cu
Farinas Acosta, L (2018). Piercing, piercing health.|lisandra@granma.cuSeptember 24, 201722:09:16

Fornes B., Diez P., Sierra C (2012). Complications and care of piercings and tattoos. 2012; 15:8-14 .

You do Acosta, M; Cardentey Garcia J; Diaz Llana, C Z; White Sacerio, M; Calero Diaz, Y (2014). The use of piercing in the oral cavity of adolescents. Rev Medical Sciences [Internet]. [cited 2016 Mar 05]; 18(2): 267-274. Available at: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S156131942014000200010&lng=es

Hernández Gonzáles, Y (2019). Use of oral piercing, a dangerous fashion in students of the Pre-University institute. http://www.tecnologiaysalud2019.sld.cu

Jimenez, H.S.; Cordova, IE; Gutierrez, JF (2015). The piercing. Tamé Magazine, 4 (10): 365-69.

Kapferer, I. (2012). Lateral lower lip piercing--prevalence of associated oral complications: a split-mouth cross-sectional study. Quintessence Int (Berl) 43:747.

Maresma Frometa, R; Rodriguez Gonzalez, D; Mainegra Acevedo, R; Navarrete Sandianis, H. (2010). Clinical findings associated with buccal and perioral piercing. http://www.16deabril.sld.cu/rev/220/articulo2.html. [Consultation: September 5, 2011].

Ravelo, M.J. (2016). Available at: https://www.medigraphic.com.cmh-2016 [Accessed: September 5, 2018].