

Oral and perioral piercing in adolescents and young adults: A review

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ABSTRACT

The use of intraoral jewellery and piercings of oral and perioral tissues has been gaining popularity among adolescents and young adults in recent years. This is of concern to dental and medical professionals because of the risks and complications for oral, dental and general health. The risk associated with piercing range from tooth wear to soft tissue trauma and systemic infections. Here, we have reviewed the perils of piercing the oral and perioral structures.

Introduction

Oral and perioral piercing is increasingly being viewed as an acceptable fashion statement in our society. It has even caught attention of the teenagers and young adults. Of late many cases of piercing involving the younger age group have been published.[1-6] In this review we highlight the prevalence of piercing among the young age group, the dynamics of factors that motivate the growing population toward this form of body art and the social, psychological and medical implications of piercing the tissue.

History

The phenomenon of body art, such as tattoos and piercing has ancient roots, rediscovered in Western society during the 70's. Oral and perioral piercing has long been practiced for religious, tribal, cultural, social, sexual or identity reasons. The earliest known representation of this piercing was in the figure of a dog created in Egypt in around 1500 BC, when it was considered a symbol of royalty. For ancient Mayans, piercing was a symbol of spirituality, virility and courage. Eskimos inserted a "labret" into the lower lip as a symbol of passage to adulthood in boys and as an act of purification in girls. The piercing of lips, cheek or tongue was also a traditional practice in Hindu, Chinese and American Indian cultures.[7] In Southern India, a vow of silence was accompanied by tongue piercing.[8] In developed countries, piercing became fashionable with the punk movement and then as part of a wider "body art", i.e., the voluntary modification of physical appearance by tattoos, branding, scars or piercing.[9] Tongue piercing was first reported in medical literature by Scully and Chen in 1992.[10]

Adolescent and Young Adults and Trend in Piercing

Firoozmand LM et al [2] found the use of oral piercing was 3.6% among students aged 14-18 years. Tattooing and piercing among adolescents was found to be 4% and 24% respectively by Bosello R et al.[3] The mean age of an individual having his tongue pierced is 19 years old.[11] Around 49 adolescent children were reported to have oral piercing in five high schools of New York.[1] Oral piercing is more common among students from state schools than those from private schools. A MEDLINE search conducted by Lester B et al revealed tattoo prevalence estimates range from 10% in adolescents to 25% in 15-25 Year old.[12] Around half of University undergraduates were found to have some type of piercing by Mayers LB.[13] Levin L et al reported some form of oral piercing in 81 patients (20.3%) in the age group of 18-24 years.[14]

Trends in Piercing Related to Sex of Individual

Slight predominance of males (54.5%) compared with females (45.45%) have been reported by Firoozmand LM et al.[2] However female predominance has been reported by Lester B et al [12].

Piercers and Their Armamentarium

The piercers are usually unlicensed and self trained and have little clinical and anatomical knowledge.[14] Hypo allergenic and non toxic materials are ideally used for piercing jewellery. Titanium, 14 or 18K gold, stainless steel, acrylic, stone, wood, bone or ivory are used.[15]

Tongue piercing consists of a stud with two balls screwed

onto each end, which is allowed to move because the length of bar is greater than the thickness of the tongue. The principle is same for lip piercing.[16]

Method of Piercing

Tongue piercing is usually carried out in midline anterior to lingual frenum. The procedure is usually performed without anesthesia. The protruded tongue is clamped, supported by a piece of cork and pierced by a needle of equal gauge to that of barbell stem.[7]

Reason for Piercing

Some of the reasons are fashion, rebelliousness, differentiation, sexual reasons, ethnic and tribal influences.[2] A significant association has been reported between piercing, smoke and alcohol use in adolescence. Subjects with piercing have higher scores on novelty seeking scale and are more likely to have family conflicts.[3] Illicit drugs and a state of depression have also been reported to be more prevalent among university students who used oral piercings.[17] Contrary to above observation Armstrong ML et al found that the main purpose for piercing in college students was self expression and identity rather than deviancy or rebellion.[18] Deschesnes M found increased likelihood of teenagers being tattooed or pierced associated with "externalized risk behavior" such as illegal activities, gang affiliation and gambling. Oliveira MD et al have reported that tattooing and body piercing may be a visible marker to identify adolescents whose lifestyle may put them at risk for morbidity and mortality.[20]

Complications

Mayers LB et al found a significant incidence of medical complications among students using oral piercing.[13] When oral lesions are compared to facial sites, the former causes more problems.[21] Oral and dental complications associated with tongue piercings are categorized as acute (early) or chronic (late). Acute complications typically arise within 24 hours following insertion of the jewellery into the tongue and are usually confined to injuries of weak tissues. The most common immediate acute symptoms include pain, swelling, bleeding and localized infection. Potential complications that occur within weeks of the piercing include functional problems, such as dysphonia, dysphagia, interference with mastication and the generation of galvanic currents between the barbell and metallic dental restorations.[22] Allergic contact dermatitis, to the metal has been reported. Less common acute symptoms include increased salivary flow rates. In most cases, these complications have not been detrimental and tend to disappear with time. However, more serious and potentially life-threatening complications have been reported, including prolonged bleeding, infections, disease transmission and airway problems secondary to swelling of the tongue. Finally, the potential risk of aspiration or inhalation of parts of the jewellery if they become loose should not be overlooked.

In 1997, DiAngelis AJ [23] first suggested that tongue

piercings may result in abnormal tooth wear (abrasion) that may lead to cold sensitivity. Gingival recession has been especially correlated with lip studs or labrets and frequently occurs on the labial aspect of the lower central incisors. Gingival recession, particularly on the lingual aspect of the mandibular anterior teeth, has also been associated with tongue jewellery.

Oberholzer TG et al [24] found in his study that around 60% of adolescents in South Africa were unaware of any complications in oral piercing. The lack of awareness related to oral complications needs to be addressed.

The American Academy of Pediatric Dentistry (AAPD) strongly opposes the practice of piercing on intraoral and perioral tissues and use of jewellery on intraoral and perioral tissues due to the potential for pathological conditions and sequelae associated with these practices.[25]

Body Piercing and Parent Consent

Pearose MM examined the trend of high school adolescent obtaining oral piercing. He found that oral piercing was done without parent consent.[1] In Brazil children are required to get their parent's permission to wear a piercing, but still children manage to get their body pierced without prior consent.[2]

Conclusion

Body piercing is a growing trend especially in young people. Dentists should be aware of body modification trends and procedures and should be prepared not only to address complications associated with it but also to provide information to patients.

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