

# Oral Piercings: A constructive genius or a destructive devil??

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**Abstract-** Piercing is today's popular form of body art and self-expression. It may seem totally safe because some celebrities use piercings to flaunt their style or attitude. But piercing tongue, lips, cheeks, or uvula is not safe and may cause extreme complications and can be life threatening. This article reviews some of these complications of oral piercings.

**Index Terms-** Body piercings, Ludwig's angina, Oral piercings, Studs, Tongue piercings

## I. INTRODUCTION

Body piercing is an ancient practice. Most items come in the form of barbells, rings or studs and are made of gold, silver or stainless steel. Sites include the ear, nose, eyebrow, nipples, genitalia and the oral cavity. <sup>(1)</sup> It is defined as 'a penetration of jewelry into openings made in such body areas as eyebrows, helix of ears, lips, tongue, nose, naval, nipples and genitals.'<sup>(2)</sup> In the United States up to 42% of male and 60% of female college students have body piercings. The incidence of piercings is increasing steadily. <sup>(3)</sup> It is known that piercing the body has spiritual, aesthetic and sexual connotations.<sup>(4)</sup>

Of significance to the dental profession is the recent increase in intraoral piercings, which is the insertion of jewelry into soft oral tissues including the lips, cheeks, uvula and tongue. <sup>(4)</sup> Piercing of oral sites may lead to a number of complications some of which are life-threatening. Dentists should be aware of the increasing number of patients with pierced intra-oral and peri-oral sites and should be prepared to offer advice and guidance to patients. Immediate post-operative complications reported were swelling and/or infections (24%-98%), pain or tenderness (14%-71%), and bleeding or hematoma. Jewelry-related complications mainly consisted of tooth fractures and wear (14%-41%) and gingival recessions (19%-68%).<sup>(5)</sup>

## II. REVIEW OF LITERATURE

Theodossy reported a case of 28 year old female who had metal barbell around 20 mm in length traversing the tongue, with the metal ball clearly visible on the dorsal surface while the ventral surface had completely healed over embedding the barbell. The tissue under the surface of the tongue was fibrosed. <sup>(1)</sup> Fleming reported 17-year-old male with bifid tongue who had a tongue ornament placed one year previously during a period of severe psychiatric disturbance. The area became infected and healed over leaving the tongue divided in the anterior midline. <sup>(2)</sup> A case of galvanic current during contact between the stainless

steel appliance and an extensive amalgam filling has also been reported. <sup>(4)</sup>

The most serious complication to date is that reported by Perkins et al in which Ludwig's angina developed secondary to tongue piercing. This was not responsive to parenteral antibiotic treatment and required intubation to secure the patient's airway followed by extra-oral surgical decompression. <sup>(6)</sup> Aspiration of jewellery may also result in airway compromise. Infection with *Staphylococcus aureus*, and *pseudomonas* spp., and *Neisseria endocarditis* are documented. <sup>(7)</sup> Upper airway compromise 48 hours after placement of a tongue-stud because of swelling has been reported. <sup>(8)</sup> Cerebral abscess has been linked to a tongue piercing. A case of serious bleeding resulting in hypotensive collapse has been published. <sup>(2)</sup>

## III. DISCUSSION

Body piercing, a form of body modification, is the practice of puncturing or cutting a part of the human body, creating an opening in which jewellery may be worn. The word piercing can refer to the act or practice of body piercing, or to an opening in the body created by this act or practice. Ear piercing and nose piercing have been particularly widespread and are well represented in historical records and among grave goods. The oldest mummified remains ever discovered were sporting earrings, attesting to the existence of the practice more than 5,000 years ago. Nose piercing is documented as far back as 1500 BC. Piercings of these types have been documented globally, while lip and tongue piercings were historically found in African and American tribal cultures. Nipple and genital piercing have also been practiced by various cultures, with nipple piercing dating back at least to Ancient Rome while genital piercing is described in Ancient India ca. 320 to 550 CE.

Body piercing is an invasive procedure with some risks, including allergic reaction, infection, excessive scarring and unanticipated physical injuries, but such precautions as sanitary piercing procedures and careful aftercare are emphasized to minimize the likelihood of encountering serious problems. The healing time required for a body piercing may vary widely according to placement, from as little as a month for some genital piercings to as much as two full years for the navel.

Complications and possible sequelae of oral piercing are listed by Theodossy as pain, swelling, infection (bacterial, viral, fungal) airway obstruction, bleeding, trauma to teeth and mucosa, speech impediment and swallowing problems, hypersalivation, lingual nerve damage, swallowed or inhaled jewellery, foreign body incorporation into site of piercing,

radiographic artifact, calculus formation on metal surfaces, galvanic and hypersensitivity to metal.<sup>(1)</sup> The possible transmission of infections such as hepatitis and HIV must also be considered. Sterile techniques, use of disposable gloves and instruments and autoclaved jewellery are necessary to limit this possibility.<sup>(9)</sup> Unusual malformations may be attributable to tongue piercings. These abnormalities may occasionally present when ornaments are no longer in situ. Patients contemplating tongue jewellery should be counselled on early and late complications.

#### IV. CONCLUSION

Dentists must be aware of the pitfalls of orofacial jewellery. The authors feel placement of tongue studs is not part of the practice of dentistry and should be avoided in the dental setting in accordance with the principle that surgeons should above all do no harm. Although reports describing the mortality associated with tongue splitting are currently not available in the literature, the risk of complications secondary to surgical procedures is well known. Therefore, dentists are recommended to discourage patients who request the procedure by educating them the risks associated with this surgery.

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