



## Correspondence

# The tongue piercing fashion and its related health costs: A perspective of clinical dentistry in Taiwan



### KEYWORDS

Tongue piercing;  
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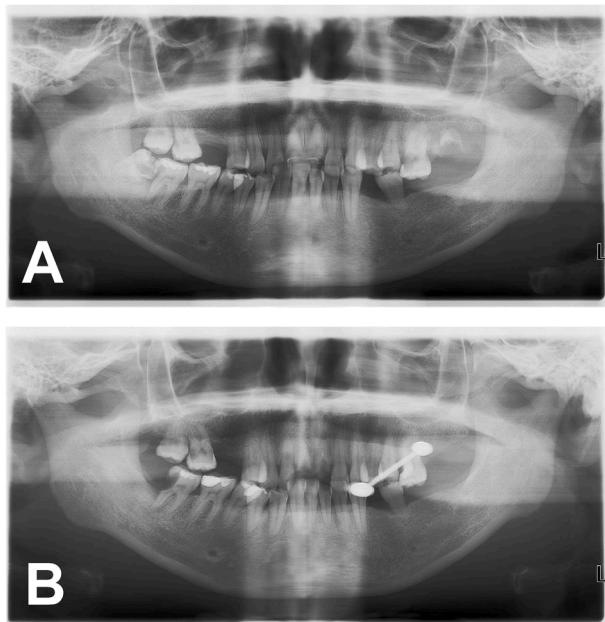
In Taiwan, the fashion is almost in line with the international trends. Young people in Europe and American are popular with the body piercings. The so-called piercing group is also common on the streets of Taiwan. In addition to the ears, the nose, tongue, lips, and even the eyelids, cheeks, navels, nipples, and reproductive organs, are other common piercing targets of the body parts.<sup>1</sup> In fact, as early as ancient humans (such as ancient Egyptians), there were behaviors such as wearing earrings and nose rings to show the various symbols.<sup>2</sup> The modern piercing people are mainly influenced by the hippie and punk movements. Their anti-traditional and anti-restraint thinking is expressed in the strange clothes, body tattoos, and piercings. In Taiwan, the mentality of young people wearing the tongue rings is mostly to attract attention and show the image of fashion leaders among their peers. However, they often ignore the health costs that wearing tongue rings must bear.

A 34-year-old female patient who has had a tongue piercing for 10 years went to a dental clinic for treatment of her oral problems (such as tooth decay, periodontal disease and impacted wisdom teeth). The panoramic radiograph of her first visit showed that her oral health was not ideal with multiple dental caries and few hopeless teeth (Fig. 1A). The panoramic radiograph after the extraction of the mesioangularly-impacted right mandibular third molar showed her tongue ring because she forgot

to remove her oral jewelry before taking the radiograph (Fig. 1B). This tongue ring was an ornament placed through her tongue piercing hole. It was not really a ring but rather a barbell. This body jewelry was made of some kind of metal material.

Although her poor oral condition did not necessarily have a direct causal relationship with wearing a tongue ring. The dentist still gave her oral health instruction about the tongue piercing. For example, the metal surface of the tongue ring might accumulate bacterial plaques or calculi like the surface of the tooth, so the tongue ring should also be removed and cleaned daily. When the tongue ring has surface roughness and was difficult to clean, it should be replaced. If possible, it should be replaced with a new one regularly (such as every 3 months).

The proper placement of the tongue ring is essential for the health, safety, and comfort. The correct placement of the tongue ring should be on the midline of the tongue, placed approximately 20 mm from the tip of the tongue, and likely pierced diagonally with the top slightly tilted back, allowing the top ball away from the teeth. This is also a more comfortable position because the top of the tongue ring is positioned in the higher part of the roof of the mouth with more space. The bottom of the tongue ring should be just in front of the sublingual frenulum.<sup>3</sup> This means that the person performing the tongue piercing must have a good knowledge of oral anatomy.



**Figure 1** The panoramic radiographs of a 34-year-old female patient without wearing a tongue ring (A) and with wearing a tongue ring (B). The tongue ring was not really a ring but rather a barbell. This body jewelry was made of some kinds of metal material. It might interfere with the radiographic image quality to some extent.

In addition, according to Taiwan's medical regulations, any performance that causes damage to the tooth tissue or changes in the oral function is considered to be a medical performance. The medical performances should be conducted by the dentists themselves or by the relevant medical personnel under the instructions of the dentists. The medical performances cannot be conducted by those without the medical personnel qualifications.<sup>4</sup> However, there is currently no government-approved management system for the professional piercers and no clinical operation guidelines for the various piercing procedures in Taiwan. From the perspective of clinical dentistry, people are basically not encouraged to wear the tongue rings or the lip rings, and their disadvantages may far outweigh their advantages.

The body piercing is an invasive surgical procedure in itself, and the tongue piercing is a kind of oral surgery that must be performed under the premise of proper disinfection and infection control. The relevant instruments must be sterilized at the high temperature and the high pressure before surgery to avoid the risk of infection from blood-borne diseases (such as AIDS or hepatitis B).<sup>3</sup> In particular, people with systemic diseases should avoid such non-therapeutic surgical procedures.

The various tongue rings and lip rings are an extra burden on the tongue and lips, affecting speech and interfering with the chewing movements. Some people may even lose their concentration at work or study because of playing with the tongue ring in their mouth. In particular, the tongue rings and lip rings are a chronic mechanical

stimulation to the surrounding oral mucosa. The long-term friction and stimulation are potential damage to the oral mucosa and may become a precursor lesion to oral cancer. When oral hygiene is poor or the oral mucosa is ulcerative among people wearing the tongue rings or the lip rings, their tongue, lips and surrounding tissues are prone to have infection and inflammation. In severe cases, the tongue rots and the taste buds are lost, and the infection may cause cellulitis, subsequently resulting in the systemic infection.<sup>5</sup> In addition, the tongue and lip ornaments are made of many materials, including metals (such as titanium, gold, silver, copper, tin), acrylic, crystal, various gems, resins, and pearls. The materials that are not government-certified may be prone to cause allergies.

In addition to the additional burden of oral hygiene and economy, wearing a tongue ring also has the additional health costs. Therefore, while pursuing fashion, it is not appropriate to sacrifice body health. Safety must be given as a priority, and the attitude of health concepts should replace the invasive fashion to avoid unnecessary piercing of the body structures.

## Declaration of competing interest

The authors have no conflicts of interest relevant to this article.

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## References

1. Ferguson H. Body piercing. *BMJ* 1999;319:1627–9.
2. Mudry A, Pirsig W. The ear in the visual arts of ancient Egypt. *Mediterr J Otol* 2007;3:81–9.
3. Bentsen B, Gaihede M, Lontis R, Andreasen Struijk LNS. Medical tongue piercing – development and evaluation of a surgical protocol and the perception of procedural discomfort of the participants. *J NeuroEng Rehabil* 2014;11:44.
4. Cheng FC, Wang LH, Chiang CP. To wear the most conspicuous decoration on the teeth: the role of the dentists in tooth gem installation in Taiwan. *J Dent Sci* 2025;20:1367–9.
5. Yu CH, Minnema BJ, Gold WL. Bacterial infections complicating tongue piercing. *Can J Infect Dis Med Microbiol* 2010;21:e70–4.

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