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Opinion

Bone Resorption as a Possible Late Complication of Labial Fillers

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Orofacial harmonization has been widely spread by Dentistry. Patient demand, associated with the financial interest of most dental surgeons, has leveraged this new dental specialty. Brazil was one of the countries to embrace this area of practice, spreading and propagating these techniques to other countries around the world [1-11].

Orofacial harmonization comprises various techniques and procedures, including the application of botulinum toxin; use of facial and lip fillers; autologous blood derivatives; hormone regulation; collagen inducers (microneedling); biophotonic procedures; bichectomy (buccal fat pad reduction); facelift; liplifting (surgical lip correction techniques); and facial lipoplasty (mechanical or chemical aspiration) [1-11].

Most of these techniques and procedures present trans- and post-surgical risks. These complications are multifactorial and can occur despite all the study and planning case by case done by the professional [1-11]. Unfortunately, sometimes the complications exceed the level of iatrogenic (which are likely to occur) and characterize the professional error, resulting in lawsuits and litigation of patients against dental surgeons [1-3,5-7,10-13]. One of the principles of Medicine is non-maleficence, in which the physician has a moral obligation to act and protect patients from harm and negligence [13], should be adopted by all health professionals.

The use of facial fillers is widely used when there is loss of volume and flaccidity, resulting from aging. Complications resulting from this procedure also occur with certain frequency, resulting in hypersensitivity reactions; inflammation and infection (characterized by erythematous areas, with edema and ecchymosis of the skin); formation of foreign bodies (granulomas); pain; necrosis; occlusion of blood vessels; blindness; cerebral ischemia; and death [1-6,8].

Hyaluronidase, an enzyme used in the lysis of hyaluronic acid when there is the formation of granulomas and foreign bodies, has been widely and indiscriminately employed. However, it is a substance that presents risks and possible complications. As it is a substance of animal biological origin, it presents the risk of contamination of prion disease in humans, causing Creutzfeldt-Jakob disease (variant of mad cow disease in humans) [4].

There is still a growing concern in the last years regarding the use of hyaluronic acid in lip filling. Recently, several authors have discussed the occurrence of bone reabsorption and erosion caused by the use of facial fillers in the perioral region [14-19]. The amount of hyaluronic acid varies from 1 to 3ml in time intervals between 6 months to 1 year [14,15].

The most severe bone resorptions were observed in the bilateral incisive fossae, while the mandibular symphysis, mental protuberance and mental tubercles were less affected. This phenomenon can be explained by the buccal cortex of the incisive fossa being thinner compared to the midline cortex [14,15,18,19].

These resorptions may occur due to pressure caused by the amount of fillers, by the affinity of hyaluronic acid for osteoclasts or even by labial incompetence and hyperactivity of the mental muscle [14,15,16,18,19].

It is important to emphasize that, from the possibility of occurrence of this complication, or other trans- and post-surgical complications, the dental surgeon should exhaustively inform the patient

about risks arising from the procedure or technique [18], avoiding ethical-legal problems and exposing the health of their patients.

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