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Dental Erosion in Bariatric Patients

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Abstract

This mini literature review aims to demonstrate the enormous impact on the oral health of patients undergoing bariatric surgery, emphasizing the dental erosion resulting from this surgical intervention, using articles published in the electronic databases Pubmed, Lilacs and Scielo.

Keywords: Salivary flow; Calcium and Vitamin D deficiency; Xerostomia; Loss of dental elements, Dental erosions; Pulp necrosis; Loss of vertical dimension; Tooth sensitivity; Soft tissue injuries

Short Communication

As a direct impact of the systemic condition of the gastroplastized patient on oral health, the literature reports low salivary flow, calcium and vitamin D deficiency, decreased bone density and the common presence of episodes of vomiting and regurgitation in patients undergoing bariatric surgery. These modifications can completely compromise the functioning of oral health, such as xerostomia, reduction of the remineralization process, easier development of carious lesions, loss of dental elements, dental erosions, pulp necrosis, loss of vertical dimension, tooth sensitivity and soft tissue injuries. However, even though there are already descriptions in the literature of all these consequences and their negative interactions with oral health, it can be said that it is still a subject that is still little discussed, approached and understood, both by the professionals who already make up the team of monitoring these patients and for the dentists themselves [1-3].

Dental erosion is a type of non-carious lesion that occurs due to the loss of dental structure caused by chemical action, without the involvement of bacteria, and can be classified as extrinsic (consumption of fruits and ingestion of acidic drinks, ingestion of medications such as vitamin C and aspirin and environmental factors) and intrinsic (diseases that cause regurgitation of gastric juice or decrease in salivary flow), characterized by smooth lesions with rounded contours, without signs of pigmentation, predominant on the palatal and lingual surfaces of the hindquarters, being able to observe, also, a shortening of the upper incisors, protruding restorations and dentin hyperesthesia. They are commonly found in patients undergoing bariatric surgery and may be associated with the successive vomiting that these patients often face as a consequence of Dumping Syndrome [3-5] its prevalence can reach up to 50% in partial gastrectomies and is probably the most common syndrome that follows partial or complete gastrectomy, characterized by a set of vasomotor and gastrointestinal symptoms associated with gastric emptying rapid or sudden exposure of the small intestine to nutrients.

The highly acidic gastric content, in contact with the oral environment, corrodes and demineralizes the dental enamel on the palatal and lingual surfaces, and eventually this erosion can progress to the point of affecting the occlusal surfaces of the posterior elements. These frequent episodes of gastroesophageal regurgitation favor an acidic oral environment, providing a negative change in the ideal plug necessary for the physiological processes considered normal and desirable to occur naturally [6,7] and the process can evolve to the point of developing a process of dentin exposure, leading to consequences whose symptom is hypersensitivity after external stimulation. The oral acid environment can originate in 3 different ways: fermentation of bacteria through ingestion of foods or drinks containing carbohydrates, especially sucrose, after ingestion of acidic foods and in the presence of gastric juice, which is the case of patients undergoing reduction stomach [8]. It is of great importance that the dental surgeon performs a thorough clinical examination and that he knows the consequences of bariatric surgery for the oral cavity, thus contributing to an improvement in the quality of life of this patient, guiding and preserving oral health, since the process it is irreversible, and the consequences are obvious [9].

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