



EDITORIAL

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The early diagnosis of dental erosion made by the professional is a sign of knowledge and commitment to the health and quality of life of patients.

Dental erosion is not a recent pathology; however, with changes in eating habits and the decrease of caries occurrences, it has been increasingly common to find in the dental office the complaint of hypersensitivity along with loss of the mineral structure of teeth. The initial stage of the erosive process is characterized by the opaque and porous surface, which may develop to dark stains and enamel wear, reaching the dentin or not¹.

This wear is saucer-shaped and mainly affects the cervical region of teeth. This disease presents a multifactorial etiology originated from extrinsic and intrinsic factors. The extrinsic factors are closely related to the intake of acidic food and beverages, and are highly responsible for the decrease of pH (hydrogen potential) of the oral environment, promoting the supersaturation of saliva. This saturation hinders the buffering effect, leading to the dissolution of enamel hydroxyapatite crystals².

The erosive process is similar to the Demineralization/Remineralization process (Des-Re) of caries, however with no bacteria involved. The intrinsic factors are related to endogenous acids produced by the organism itself. Individuals with eating disorders such as bulimia and anorexia, and individuals with gastroesophageal disorders such as reflux, are included in the risk group for dental erosion because, in the moment of regurgitation, the acids present in the stomach return to the oral environment and erode the surface of teeth. Patients with history of some of these diseases should be oriented regarding the imminent risk of the erosive process to start at any moment.

Besides the aforementioned etiological factors, some determinant factors modify the erosion process such as saliva, the acquired pellicle, and the positioning of teeth, as well as eating disorders, use of drugs, and occupational risks. The main biological parameters that protect the

oral environment are saliva and the acquired pellicle. Saliva maintains a constant pH, and the acquired pellicle, which is rich in mucins, proteins, and free from pathogenic bacteria, forms a protective pellicle in both teeth and the mucosa².

Therefore, patients with xerostomia are also included in the risk group for dental erosion, because of the decrease of saliva and of quality of the acquired pellicle. Because dental erosion is a multifaceted pathology, the dentist should be aware of signs and symptoms, and above all, to the medical and dental history of the patient. Patient awareness is an important stage for the success of the treatment.

In more advanced lesions, the restorative practice is recommended through adhesive techniques, both to eliminate hypersensitivity and to restore function and aesthetics. Besides restorative techniques, the conservative and preventive techniques for treatment should be used simultaneously. Practical examples are: decreasing the consumption of acidic beverages; using a straw to consume such beverages, since it helps to reduce the direct contact of the dental surface with the acids present in beverages; adapting toothbrushing; and in more severe cases, decreasing toothbrushing frequency respecting the waiting time (about forty minutes) after food intake to perform hygiene².

Among the beverages most mentioned in scientific literature^{1,3-5} are phosphoric acid-based soft drinks (Coca-Cola™-regular, diet, light, and zero; Pepsi™-regular, diet, and light), citric acid-based soft drinks (Sprite™, Mountain Dew™, Soda™, Schweppes™), isotonic drinks (Gatorade™), and energy drinks (Red Bull™ and Fusion™). Apart from soft drinks and energy supplements, juices are vastly mentioned (lemon, orange, strawberry, and apple flavours).



Some authors⁴ mention the addition of calcium, iron, manganese, magnesium, and zinc ions in industrialized beverages to decrease the acidic potential and consequently the erosive potential of such beverages on the dental surface. The initial diagnosis of the disease is critically relevant so its development is contained and patients do not suffer extensive damages in their smiles. Dental erosion affects not only aesthetics and function, but also impairs dental treatment if required, because of an increased shear strength and risk of cracks and fractures when removing orthodontic accessories⁵.

The importance of a complete anamnesis questioning eating habits is essential for dentists, regardless of their

field of expertise. Knowing to identify dental erosion is the first step for an effective and conservative treatment, restoring the health and well-being of the patient.

LUIZ RENATO PARANHOS. DDS, MSC, PHD

Professor, Department of Dentistry,
Federal University of Sergipe, Brazil.

CATIELMA NASCIMENTO SANTOS. DDS, MSC

Professor, Department of Dentistry,
Federal University of Sergipe, Brazil

SIGMAR DE MELLO RODE. DDS, MSC, PHD

Full Professor, Department of Dental Materials and Prosthesis,
São Paulo State University - UNESP, Brazil

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