

Short Communication

Dental Erosion and Patient Care

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Received: July 29, 2024**Accepted:** August 04, 2024**Published:** August 13, 2024**Abstract**

If dental erosion remains untreated, it can become more severe and cause damage to teeth. Numerous causes are related to the way we live today, particularly diets. According to studies, erosion is more common in areas where people are ignorant of it.

Opinion

These days, people are more informed and conscious of the need to protect their dentition from dental caries to maintain a longer life cycle and healthier teeth. However, many associated variables make tooth erosion a prevalent issue. One kind of tooth wear known as dental erosion happens when it is a chemical procedure wherein tooth hard tissue dissolves in acid without the need for bacterially generated acids [1]. The reasons for this may be extrinsic, intrinsic, or a combination of these, with a tiny fraction being idiopathic. To be more precise, it is the permanent softening and eventual loss of tooth hard tissue brought on by an acid-dissolving chemical process that is not related to bacterial plaque acid and is not directly linked to mechanical, traumatic, or dental caries causes [2]. Erosive tooth wear is the chemical-mechanical loss of tooth surface resulting from dental erosion which is followed by abrasive and/or attritive wear. Anyway, if germs from the plaque remain uncleaned, the erosion lesion may become contagious. In the beginning, the patient showed no symptoms, but as things worsened, they might have complained of pain, sensitivity, or an unsightly dentition that made it difficult for them to work [3–5]. To get the right diagnosis and create a plan that works for each client, a thorough history taking and clinical examination are essential.

The intrinsic cause is rooted in the internal body, specifically the gastric juice that enters the mouth through GERD, frequent vomiting during pregnancy or drunkenness, rumination habits, anorexia nervosa, or bulimia. This results in palatal tooth erosion in the upper anterior teeth, which is challenging to repair. In Europe, 8.8%–25.9% of adults suffered with CORD [6,7]. Referrals for care and consultation with a medical physician or psychologist for appropriate instances would be required in extreme circumstances. The majority of aetiologies for dental erosion are extrinsic. Even young children often consume diet drinks and acidic-nice drinks since they are so simple to prepare, and there are a lot of healthy food and drink options accessible in the market. Nevertheless, many people are still inclined to eat an acidic diet. Customers have a wide range of options, including pure fruit juice, soft drinks, carbonated drinks, and sports drinks with varying acid content. Consuming them frequently is not the only thing that matters; gargling or whirling them before swallowing might be detrimental. Using a straw is recommended to prevent prolonged exposure to an acidic solution in the oral environment.

Consuming acidic foods, such as citrus fruits, regularly also had the same impact, particularly citric acid, which has a chelating effect and a low pH. In addition to food, occupation, and surroundings can also lead to dental deterioration. Individuals who work in fruit juice, soft drinks, or alcohol factories who are required to taste acidic beverages are particularly vulnerable. It is advisable to suggest that they chew cheese, gargle with fresh milk, or treat tooth erosion. Antacid and refrain from cleaning their teeth right quickly after tasting to prevent the erosion of their teeth from getting worse. Those who regularly used the chlorinated swimming pool also posed a significant risk. In this instance, it would be beneficial if they wore a soft mouthguard to reduce the amount of pool water that seeps into their teeth and prevent erosion. Certain drugs and dietary supplements, such as aspirin and vitamin C, might cause erosion if they are often chewed or consumed. Physicians should be consulted to determine whether switching to a different kind of medicine is appropriate.

A thorough inspection and diagnosis are required for pathologic wear brought on by erosion. Planning took into account the appropriate course of action for handling the case, which often involves phases with intervals of observation. Severe hypersensitivity reactions or other acute symptoms will be treated urgently. Preventive care and habit advice are recommended for early start needs. Dietary advice and analysis were included in this. The best course of action is to delve into the specifics of the issues at hand, with the advice being tailored to the cause of the erosion. A second restorative phase may begin if the condition is inactive. There is a significant chance that the therapy will not be successful if the erosive disorder is still active, which would frustrate the patient and the operators. The primary goals of restorative dentistry are to restore function, protect the tooth's remaining structure, and get rid of uncomfortable symptoms. Regular monitoring is crucial, as is the case when further treatment is appropriate given the current situations that may arise in the future.

In Australian undergraduate research, the awareness rate of tooth erosion was reported to be 92.1%. where fruit juice and soft drinks were most frequently regarded by respondents as acidic beverages [8]. 418 people participated in the research via an online survey. Dental erosion was not as well-known among students who were older and majoring in science, pharmacy, paramedicine, or physiotherapy. In addition to having less consumption, those who were knowledgeable also knew more about dental degradation. One should never undervalue the significance of imparting knowledge. In a Stockholm investigation, intra-oral photos were used to clinically detect tooth erosion in 28.3% of 15-year-olds and 34.3% of 17-year-olds. In

18.3% of the teenagers, severe erosive wear of grades 3 and 4 was discovered by SEPRS. There is a substantial correlation between the use of soft drinks and erosive lesions, which are more common and severe in males than in females [9]. Another study lists the suggested materials and treatments for treating erosion in a preventive manner, particularly for stopping hypersensitivity. CPP-ACP studies have shown anti-erosion effectiveness when used either before or after erosive wear [10,11].

Conclusion

Not many people are aware of dental erosion or have limited awareness of it. These days, there is a growing risk of exposure to it, therefore many dentists and other healthcare professionals must work together to enhance and disseminate information to benefit the community.

References

1. Mark AM. Pregnancy and oral health. *J Am Dent Assoc.* 2021; 152: 252.
2. Tulek A, Mulic A, Runningen M, Lillemo J, Utheim TP, Khan Q, et al. Genetic Aspects of Dental Erosive Wear and Dental Caries. *Int J Dent.* 2021; 2021: 1–14.
3. El-Serag HB, Sweet S, Winchester CC, Dent J. Update on the epidemiology of gastro-oesophageal reflux disease: a systematic review. *Gut.* 2014; 63: 871–80.
4. Levine R, Stillman-Lowe C. Dental Erosion and Erosive Tooth Wear. 2019; 49–56.
5. Warreth A, Abuhijleh E, Almaghribi MA, Mahwal G, Ashawish A. Tooth surface loss: A review of literature. *Saudi Dent J.* 2020; 32: 53–60.
6. Donovan T, Nguyen-Ngoc C, Abd Alraheem I, Irusa K. Contemporary diagnosis and management of dental erosion. *J Esthet Restor Dent.* 2021; 33: 78–87.
7. Kusnik A, Vaqar S. Ruminant Disorder. 2024.
8. Schmidt J, Huang B. Awareness and knowledge of dental erosion and its association with beverage consumption: a multidisciplinary survey. *BMC Oral Health.* 2022; 22: 35.
9. Skalsky Jarkander M, Grindefjord M, Carlstedt K. Dental erosion, prevalence and risk factors among a group of adolescents in Stockholm County. *Eur Arch Paediatr Dent.* 2018; 19: 23–31.
10. Né YG de S, Souza-Monteiro D, Frazão DR, Alvarenga MOP, Aragão WAB, Fagundes NF, et al. Treatment for dental erosion: a systematic review of in vitro studies. *Peer J.* 2022; 10: e13864.
11. Al Saady D, Hall C, Edwards S, Reynolds EC, Richards LC, Ranjitkar S. Erosion-inhibiting potential of the stannous fluoride-enriched CPP-ACP complex in vitro. *Sci Rep.* 2023; 13: 7940.