Erosive tooth wear combined with bruxism and parafunctional habits ; prevention, diagnosis and treatment

Erosive tooth wear is a prevalent oral condition frequently observed in Israel and other developed nations worldwide. Despite its gradual progression, it can significantly impact an individual's quality of life.

The risk factors for ETW include acids from both external and internal sources, sometimes coupled with physical forces such as abfraction, attrition, abrasion, and parafunctional habits.

Early detection plays a crucial role in determining the appropriate treatment. A constant "race" occurs between acids and the protective effects of the pellicle and saliva. It is the responsibility of dental professionals to thoroughly document this condition in clinical records and effectively communicate this information to patients.

Fortunately, we now have simple tools like the basic erosive wear exam (BEWE), which enables grading of the condition for each patient and guides dental professionals in managing individual cases.

In our presentation, we aim to discuss the diagnosis, prognosis, and treatment dilemmas by showcasing various dental cases treated in the Postgraduate Program in Prosthodontics at the Prosthodontic Department of The Maurice and Gabriela Goldschleger School of Dental Medicine, Sackler Faculty of Medicine, Tel Aviv University, Israel.

We will present cases ranging from mild to moderate to severe erosive tooth wear, addressing the unique treatment challenges in each case. Additionally, we will introduce diverse treatment modalities, such as monolithic zirconia crowns, inlays, and onlays, while discussing the advantages and disadvantages of each approach. Different adhesion techniques and postoperative instructions for patients will also be covered.

Our ultimate goal is to enhance awareness among dental professionals, particularly considering the prevalence of an acid-rich diet in Israel due to its robust agriculture industry, various occupational activities with high risk for erosion, and stressful lifestyle, which can sometimes contribute to bruxism, further exacerbating tooth wear in combination with erosion.

By considering all these factors, we aim to provide guidance to dental professionals on how to effectively manage each case.