Micro-invasive treatment with resin infiltration technique - an option?

Introduction and Objectives

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The resin infiltration technique represents a new approach in the treatment of non-cavitated caries lesions, mild fluorosis and superficial white spots. This method consists in using a low-viscosity light-curing resin which acts by capillarity, creating a barrier which blocks the bacterial dissemination and progression of caries in the case of white spots in the enamel in the aesthetic zone, eliminates the opacity of the same, making them almost imperceptible.

We performed a bibliographical research of scientific articles published in specialized magazines between 2014-2015, with this keywords: Resin infiltration; white spot; minimal intervention dentistry; non-cavitated lesions; remineralization; enamel. To develop and refine this technique.

Here we present two clinical cases demonstrating the efficacy of micro-invasive treatment in enamel lesions with resin infiltration technique.

Case Report

Case 1
Female patient, 21 years old, unhappy with the presence of unaesthetic spots on teeth of the anterior-superior sector (1.3-2.3) associated with demineralization lesions after removing the orthodontic appliances. With the patient’s agreement, a decision was made to perform resin infiltration technique with Icon® (DMG, Hamburg, Germany).

Case 2
Male patient, 36 years old, dissatisfied with the appearance of his maxillary central incisors. We started by evaluating the extent and depth of white spot lesions by transillumination with the light curing. The physical and clinical history evaluation, led to the diagnosis of hypomineralization on teeth 2.1. Microabrasion enamel technique with Opalustre (Ultradent Products, Inc., South Jordan, USA) followed by resin infiltration technique with Icon® (DMG, Hamburg, Germany) and restoration with composite (ENA HRI/Micerium) performed on tooth 2.1.

Conclusions

Based on the satisfactory results obtained in both cases, we conclude that the resin infiltration technique is very promising and could be considered as a minimal invasive procedure. However, long-term follow-up evaluation must be carried out to affirm the efficacy and durability of this type of treatment.

References

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