

CHAPTER 1

ORTHODONTIC STRIPPING

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INTRODUCTION

Interproximal enamel reduction (IER) is a clinical procedure that involves anatomical contouring and preservation of the proximal enamel surfaces of permanent teeth. Its main objective is to create space during orthodontic treatment. However, this process of reduction and reshaping requires great caution and precision (1).

This procedure is known by several terms, including “stripping”, “slicing”, “mesiodistal reduction”, “selective grinding”, “Hollywood trim”, “interproximal wear”, and “coronoplasty”.

Since tooth extraction is an irreversible treatment modality, non-extraction approaches are preferred in borderline cases. If needed, and in cases where the mandibular incisor angulation cannot be adequately compensated, extraction becomes inevitable. Space gaining methods have long been debated in the literature and include molar distalization, incisor proclination, arch expansion, stripping, and as a last resort, extractions (5).

Stripping has wide applicability and is utilized in restorative, orthodontic, and prosthodontic treatments to reshape tooth surfaces. In orthodontic treatment, after alignment is achieved with aesthetic restorations and interproximal reduction, the procedure should aim to preserve stability by maintaining existing overbite and overjet. A synthesis of all treatment methods is necessary for comprehensive therapy (2).

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rubber dam should be used during this application to prevent gingival irritation. This will prevent retention areas deep enough to be reached with dental floss, eliminating the risk of caries and periodontal disease.

Numerous studies have been conducted to minimize the risk of caries and periodontal disease after stripping. Researchers have attempted to apply sealant to the etched surfaces after stripping, and surfaces as smooth as enamel have been achieved. However, due to the difficulty of maintaining a dry environment in the subgingival area and the difficulties in removing excess resin, controlling the removal, and applying it, the success of sealant application is questionable. Sealant coverage can delay remineralization of the etched enamel surface; in other words, with good oral hygiene, remineralization is expected to occur within a 9-month period. Fluoride solutions are also used to achieve remineralization, and the degree of remineralization varies depending on the amount of fluoride in the calcifying solution.

Careful attention to the application steps and cooling the stripping process eliminates potential iatrogenic effects such as heat sensitivity and increases our success rate. Stripping is an alternative treatment method used in orthodontic practice because it is a practical method, provides a rapid response to treatment, and provides solutions to both aesthetic and functional problems.

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