

ROOT SURFACE TREATMENT



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INTRODUCTION

Periodontal regeneration is still the elusive goal of periodontal therapy. To have regeneration of the periodontium there should be attachment of new periodontal fibres into newly formed cementum. The periodontal disease activity results in alteration of structural, morphological and chemical properties of cementum covering the root surface, the pathologic change on root surface has to be eliminated from microorganisms and their products.

Studies have shown that a healthy root surface is a must for regeneration to occur. Presence of healthy root surface promotes formation and stabilization of fibrin clot, adhesion and migration of the cells in the periodontal ligament which in turn plays an important role in healing and regeneration.

Various procedures have been carried out to achieve a healthy root surface that promotes regeneration. Among them, root planing with hand instruments is the most common procedure. Root planing results in removal of the diseased cementum and deposits from the root surface however there is also deposition of a smear layer. This smear layer contains small particles of cementum, small pieces of dislodged calculus and endotoxins. This