

# **THE ROLE OF GROWTH FACTORS IN PERIODONTAL WOUND HEALING AND REGENERATION**

**- A REVIEW**



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Periodontal disease activity results in destruction of periodontal tissues viz. Periodontal ligament, Alveolar bone and Cementum, eventually leading to tooth loss if left untreated.

Periodontal therapy can be undertaken by non-surgical and by surgical methods. Periodontal therapeutic procedures are directed to arrest disease progression and achieve regeneration of lost tissues.

Periodontal surgical procedures are carried out as a treatment modality to arrest the disease progression. After periodontal surgery the healing that takes place is most often a long junctional epithelial attachment with little or no regeneration. The tissue levels are not changed to the pre-disease condition. The periodontal ligament being a very complicated one, involves various components for regeneration. All the components must be restored to their original position, for that the cells have to repopulate that the wound created after surgery and create an appropriate matrix and later differentiate to form the respective tissues.

At many occasions procedures like bone grafting, use of membrane are undertaken to achieve regeneration. The latest amongst the regenerative procedures is the use of **Growth Factors**. Growth factors are a group of polypeptides that are natural to every cell. They are involved in a variety of cell-to-cell and cell-to-matrix interactions both during development of a