

***GUIDED TISSUE REGENERATION FOR  
MULTIPLE PERIODONTAL DEFECTS IN  
ANTERIOR TEETH  
( A CLINICAL STUDY)***

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Periodontal surgery as a part of the treatment of periodontal diseases is mainly performed :-

1. To gain access and visibility to diseased root surfaces,
2. To achieve pocket reduction or elimination, and
3. To restore the periodontal tissues lost through the disease i.e a new attachment formation or periodontal regeneration.

To accomplish the latter, often referred to as the ultimate goal of periodontal therapy, a number of surgical procedures have been advocated<sup>18</sup>. However, periodontal pockets normally heal by the formation of a long junctional epithelium. Indeed minimal amount of periodontal regeneration is generally seen following the use of traditional methods of periodontal treatment. Several studies on periodontal wound healing following different treatment modalities revealed that neither of the procedures alone or in combination with grafting with bone or bone substitutes would result in the formation of a true new attachment<sup>25</sup>. These findings on periodontal wound healing led to the development of the so called Guided Tissue Regeneration therapy.

The term “Guided Tissue Regeneration” was coined by **Gottlow et al** to designate techniques that enhance selective cell population on the root surface from fibroblasts and other progenitor cells originating in the periodontal ligament<sup>16</sup>. It has been defined by **Chung** as the creation of an environment, which following a periodontal flap procedures allows the cells from periodontal ligament to repopulate the debrided root surface area and form new periodontal attachment<sup>25</sup>.