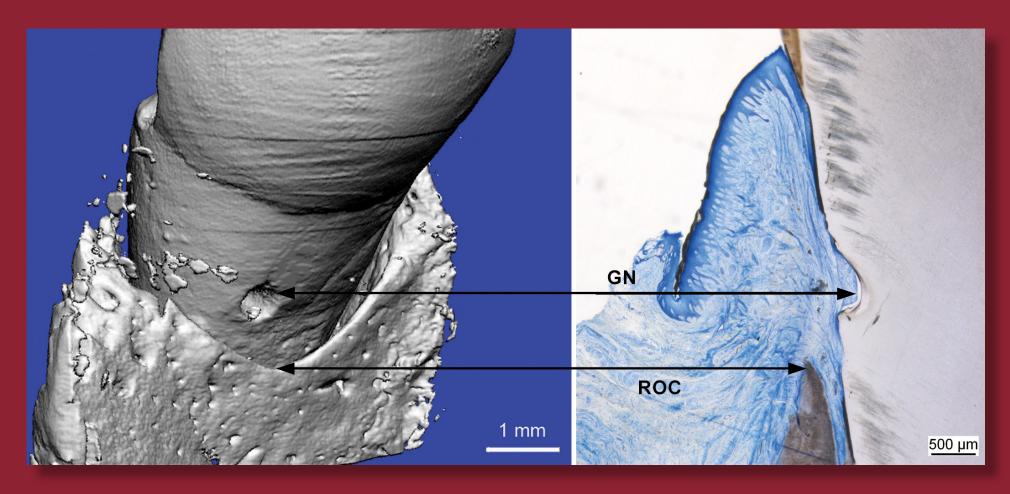
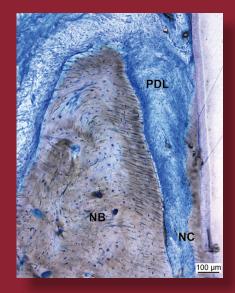
HISTOLOGIC EVIDENCE OF TRUE PERIODONTAL REGENERATION

Representative case of site treated with **GEM 21S**®



(Left) Nine months after treatment with GEM 21S®, dense cortical bone has regenerated covering the reference notch that had been placed at the presurgical osseous crest. The bone level is now just apical to the gingival reference notch (GN). ROC = regenerated osseous crest.

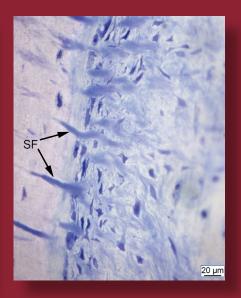
(Right) In this ground section, both new bone and PDL have formed almost to the gingival reference notch confirming the micro CT findings.



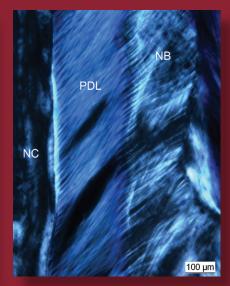
At higher power, perpendicularly oriented connective tissue fibers are seen inserting into the newly formed bone (NB) and cellular cementum (NC). PDL = periodontal ligament.



In this low power image, newly formed cementum, PDL, and bone are observed 9 months after treatment with GEM 21S®. Note the clear demarcation between the old bone and the newly formed bone.



Under polarized light, Sharpey fibers (SF) are seen inserting into newly regenerated bone (NB) and cementum (NC).



In the ground section, well-defined connective tissue fibers are also seen inserting into regenerated cementum. PDL = periodontal ligament.*

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