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Combination therapy including serratiopeptidase improves outcomes of mechanical-antibiotic treatment of periimplantitis

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Abstract

This study was designed as a retrospective analysis of clinical outcomes of cases of periimplantitis treated by mechanical debridement and the administration of antibiotics combined or not with the administration of either the proteolytic enzyme serratiopeptidase (SPEP) or non-steroidal anti-inflammatory drugs (NSAIDs). Clinical charts of 544 partially edentulous patients treated for periimplantitis between June 1996 and December 2010 were analyzed to obtain clinical data of the affected implants just before the beginning of treatment and 12 months later to evaluate the outcomes of combined mechanical antibiotic treatment alone or in combination with the co-administration of the anti-inflammatory SPEP or NSAIDs. The comparative analysis revealed that therapeutic outcomes were significantly different in the three groups. Failure rate in the group that received SPEP (6 percent) was significantly lower compared to the group that received NSAIDs (16.9 percent; P less than 0.01) and to the group that received no anti-inflammatory therapy (18.9 percent; P less than 0.01). Treatment including SPEP was associated with significantly better healing also when successful treatments alone were considered. The data reported in this paper strongly support the hypothesis that SPEP is a valid addition to protocols for the combined therapy of peri-implantitis. In fact, it allows to enhance success rates significantly and also favors better tissue repair around successfully treated implants as compared to other regimens.

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