

Publications

Study

Users report

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**Healing of intrabony peri-implantitis defects following application of a nanocrystalline hydroxyapatite (Ostim®) or a bovine-derived xenograft (Bio-Oss®) in combination with a collagen membrane (Bio-Gide®). A case series\***

**Scientific Information**  
**Ostim**

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## Objective

The aim of the present case series was to evaluate the healing of intrabony peri-implantitis defects following application of a nanocrystalline hydroxyapatite Ostim® or a bovine-derived xenograft in combination with a collagen membrane.

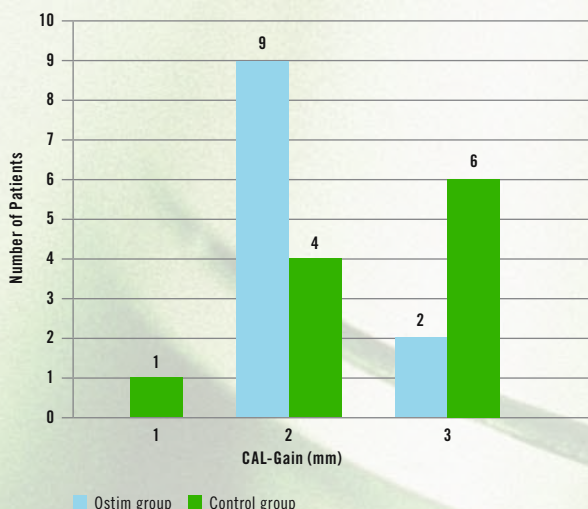
## Materials and Methods

22 patients having moderate peri-implantitis were examined. The defects were treated with access flap surgery, debrided using plastic curettes, rinsed with sterile physiologic saline and filled with a bone grafting material. The defects of the one half of patients were filled with the nanocrystalline hydroxyapatite Ostim®, the other half with the bovine xenograft Bio-Oss® in combination with the collagen membrane Bio-Gide®. Postopera-

tive care consisted of rinsing with a 0.2 % chlorhexidine digluconate solution twice a day for 2 weeks. A supragingival professional implant/tooth cleaning was performed at 4, 12 and 24 weeks after treatment. 6 months following treatment the changes of the pocket depths and the attachment loss were measured. In the beginning and 6 months after surgery a radiographic control was taken.

## Results

CAL-gains in the Ostim group and in the control group:



Clinical parameters at baseline and 6 months following surgery (mm)

Clinical Parameters		Baseline Control	After 6 Months	Difference
Pocket Depth	Ostim group	7.0 ± 0.6	4.9 ± 0.6	2.1 ± 0.5
	Control group	7.1 ± 0.8	4.5 ± 0.7	2.6 ± 0.4
Gingival Recession	Ostim group	0.5 ± 0.5	0.8 ± 0.5	0.3 ± 0.2
	Control group	0.4 ± 0.3	0.7 ± 0.6	0.3 ± 0.2
CAL	Ostim group	7.5 ± 0.8	5.7 ± 1.0	1.8 ± 0.6
	Control group	7.5 ± 1.0	5.2 ± 0.8	2.3 ± 0.6

## Conclusion

The results have indicated that both treatment procedures led to clinically important reductions in pocket depths and gains of CAL

at 6 months after surgery. Both methods improved healing of intrabony peri-implantitis defects in this case study.

\* Schwarz F, Bieling K, Latz T, Nuesry E, Becker J. Healing of intrabony peri-implantitis defects following application of a nanocrystalline hydroxyapatite (Ostim®) or a bovine-derived xenograft (Bio-Oss®) in combination with a collagen membrane (Bio-Gide®). A case series. J Clin Periodontol 2006; 33; 491-499

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