

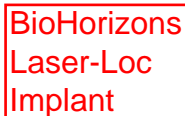
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OC-3: The effect of a laser-grooved implant collar compared to a standard implant collar on peri-implant hard and soft tissue healing

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Each of 26 patients received a single implant with either a laser-grooved collar (13 patients) or a standard collar (13 patients) in the anterior maxilla. Provisional restorations were placed after 2 weeks. The primary outcomes were papilla formation and gingival recession. All implants had a resorbable blast textured (RBT) surface and a slight platform switch.

BioHorizons
Laser-Loc
Implant



Implants were placed 2-3 mm apical to the gingival margin of the adjacent tooth and the implant position was slightly palatal. Various parameters were evaluated, including PES. All placement objectives were met for both groups.

More Bone Loss
with laser-grooved
implants



In terms of gingival recession, the results found were in line with data from other studies. There were no differences in papilla dimensions between the groups, and the amount of papilla fill was in line with previous studies. Bone change from the implant platform to the bone crest after 6 months was 1.0 mm and 0.8 mm mesial and distal, respectively, for the laser-grooved implants and 0.4 mm and 0.4 mm mesial and distal, respectively, for the standard implants. PES scores and papilla index were comparable between the groups, and subjective esthetic scores were also similar. Both groups had similar sites with $\geq 50\%$ papilla formation. No significant differences were found for any of the evaluated parameters.