

# Advantages and esthetic results of erbium, chromium:yttrium. scandium. gallium. garnet laser application in second-stage implant surgery in patients with insufficient gingival attachment: a report of three cases

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**Abstract** Traditional implant placement involves two surgical stages. Although the second stage is comparatively less aggressive for the patient, postoperative pain and swelling can be further reduced by the use of laser instead of a scalpel. Correct handling of peri-implant soft tissue is of major importance in obtaining adequate gingival tissue attachment around implants. The presence of this keratinized gingiva ensures adequate esthetic results and maintains implant health. We report on three patients with implants in the anterior area who were operated on under the above conditions. Traditionally, the tissue overlying the implants is removed and eliminated. In seeking a way to preserve the attached gingiva, we raised a trapezoidal flap, uncovering each implant and allowing apical repositioning

and transpositioning of keratinized gingiva to the buccal side. The results obtained were compared with those from other patients operated on by conventional scalpel. The erbium, chromium:yttrium. scandium. gallium. garnet (Er, Cr:YSGG) laser minimized postoperative pain, and the time to prosthetic rehabilitation was also shortened. The esthetic results were far superior, and no complications were recorded.

**Keywords** Erbium, chromium:yttrium. scandium. gallium. garnet (Er,Cr:YSGG) laser . Second-stage implant surgery

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