

MODIFIED CONNECTIVE TISSUE PUNCH TECHNIQUE TO INCREASE THE VESTIBULAR/BUCCAL KERATINIZED TISSUE ON FLAPLESS IMPLANT SURGERY: A CASE SERIES

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The aim of this article is to show a simple and predictable technique to enhance both the vestibular/buccal (V/B) gingival thickness (GT) and keratinized tissue width (KTW) improving the soft-tissue profile after flapless implant placement. The technique proposed was named Modified Connective Tissue Punch (MCTP). Fourteen patients (6 men and 8 women) aged between 35 and 69 years (mean value 48.07 ± 13.023 years) were enrolled in this case series. Seventeen implant sites were submitted to flapless procedure. The connective punch (CP) was harvested with a motor-driven circular tissue punch and then a full-split dissection was executed, in order to create a deep pouch, beyond the mucogingival junction, on the V/B side. In this recipient site the CP was placed. The normal flapless surgical protocol was used; implants were inserted and covered with transgingival healing cap screws. GT and KTW were measured: both immediately before and after surgery; at the time of the prosthetic finalization (3-4 months, respectively, for mandible and maxilla); 1 year post surgery follow-up. GT was measured at 1 mm, 2 mm and 5 mm on the V/B side, from the outline of the punch. Both KTW and GT at 1 and 2 mm can be effectively increased, while no significant effects for GT at 5 mm can be expected from this technique. Furthermore, the mean values of KTW and GT at 1 mm and 2 mm show significant increases at 3-4 months post-operative, while no further significant increments are shown at 1 year post-operative follow-up. The Authors recommend the use of the MCTP technique to reduce the number of aesthetic complications and soft tissue defects in flapless implant surgery. Longer follow-ups are needed to evaluate the stability of peri-implant tissues over time.

Tooth replacement by means of dental implant is considered to be a predictable procedure in modern dentistry, for both aesthetics and function.

The final goal of implant-supported rehabilitation is to achieve a soft and hard tissue integrity with optimal aesthetics through a minimally invasive

surgery combined with an accurate soft-tissue treatment in order to facilitate peri-implant soft-tissue stability over time (1).

Flapless surgical approach was introduced by Ledermann in 1977. In this procedure, a motor-driven circular tissue punch or a circumferential incision

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