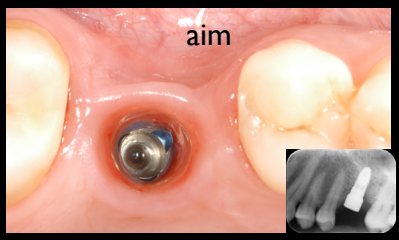
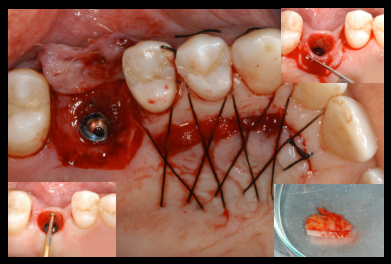
Roll-flap combined with sub-epithelial connective tissue graft in the case of a too apically positioned implant

C. Coraini, C. Casto, F. Buono, T. Mascarello, P. Raschiotti, L. De Micheli

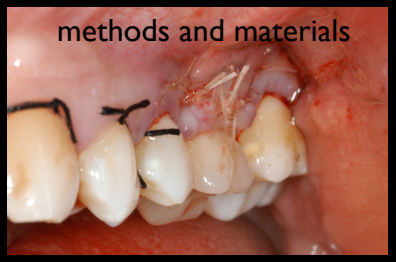
Istituto Stomatologico Italiano,
Scientific Director:
Dr. Luca De Micheli
CAD-CAM Prosthetic Department,
Head: Dr. Cristian Coraini
Via Pace, 21
20122 Milan - Italy

The aim of this work was to present a mucogingival surgical technique capable of increasing the thickness of gum tissue around an implant placed too apically in the area 2.6 with bone atrophy, trying to raise the existing gum profile and reducing the discomfort reported by the patient (food stagnation).

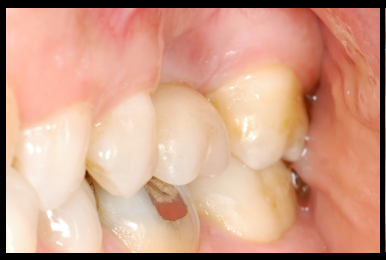


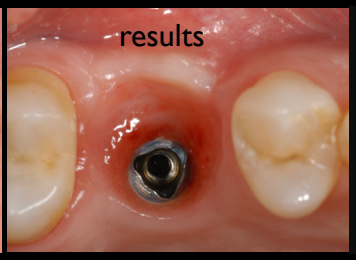


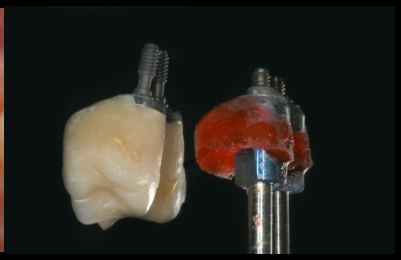
We performed a partial thickness flap (palatal - buccal translation), after scarification of the inner-buccal and outer-palatal peri-implant sulcus, rotating it on itself through the roll technique and allowing the juxtaposition of the resulting graft to the palatal and crestal scarified-rotated area. Three different partial thickness incisions were executed: two vestibular intra-sulcular and one horizontal on the palatal side.

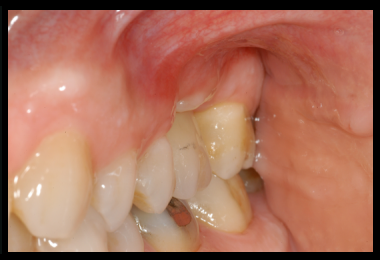


After dissection of the flap and suture of the palatal portion to the buccal side (resorbable suture 5/0), the epithelium-connective tissue was collected from the palate adjacent to the operated area. The graft was sutured to the periosteum on the vestibular side of the implant, inside the roll-flap previously prepared, and partially on the crest.

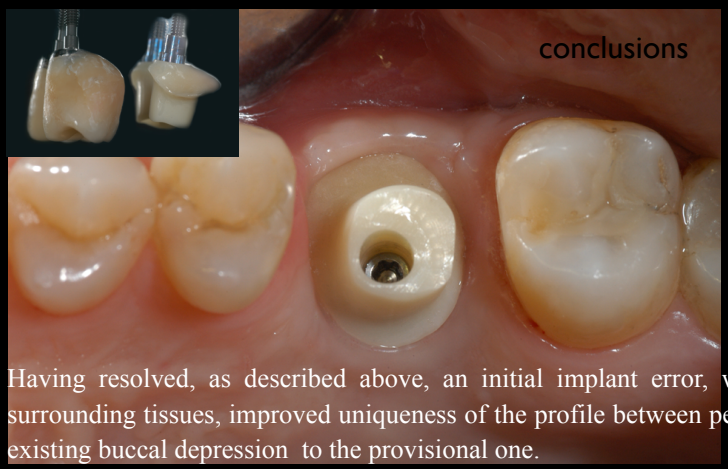


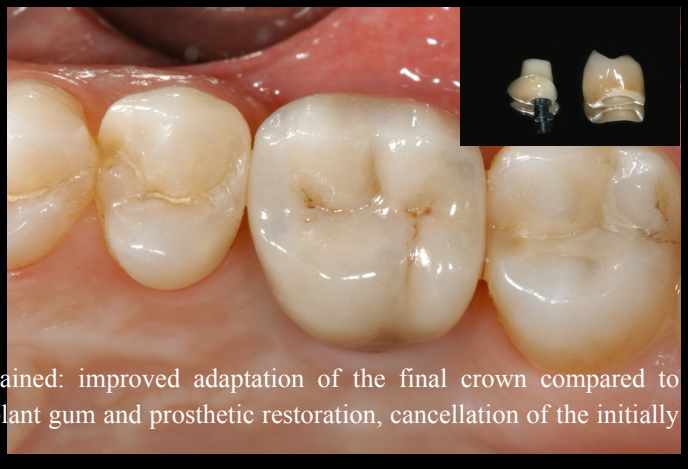






The apical-coronal and bucco-palatal gum increase immediately proved to be fine. The peri-implant gingival biotype has been thus conditioned and surgically enhanced by the prosthetic management of the emergency profile of the temporary crown at first only provisional (screwed), then permanent (cemented).





Having resolved, as described above, an initial implant error, we obtained: improved adaptation of the final crown compared to surrounding tissues, improved uniqueness of the profile between peri-implant gum and prosthetic restoration, cancellation of the initially existing buccal depression to the provisional one.