



A customized subepithelial connective tissue graft for interdental papilla reconstruction and soft tissue augmentation

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Introduction:

Due to the minimal blood supply and other reasons, stable reconstruction of interdental papilla is difficult. This article presented three cases , which describe a customized sub epithelial connective tissue graft aiming to overcome the clinical challenge, with the combination of tunneling technique.

Methods:

An original customized subepithelial connective tissue graft combined with tunnel technique aimed to reconstruct interdental papilla (IP) . The subepithelial connective tissue graft was partially spilt to create a bowtie-like shape, with four lateral wings and a main body. The four wings were tightly wrapped around the adjacent abutments, and the body part was used to reconstruct the IP.

Results:

With the customized SCTG, a successful reconstruction of IP has been achieved in cases 1 and 2, as the results of the one-year follow-up show. In case 3, when the width and thickness of customized SCTG were changed, the missing papilla can be reconstructed and the peri- implant soft tissue volume can be increased at the same time . The cases presented here have shown successful reconstruction of IP with our customized SCTG in the peri-implant area. The customized SCTG, with a bowtie-like shape, could simultaneously contribute to the gingival papilla reconstruction and soft tissue defects improvement. What's more, as its four lateral wings can wrap around the adjacent implant or teeth, it also provided more stability and prevents twisting.Our customized SCTG achieved acceptable results in the reconstruction of IP around single implants or between implants according to the cases.

Conclusion:

This study provides a new method to reconstruct IP. The customized subepithelial connective tissue graft may be a good choice when a lack of gingival papilla and soft tissue fullness occurs, which will be of great benefit to meet the aesthetic needs of patients.

