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"

Evaluation of Human Peri-Implant Soft Tissues around Alumina-Blasted / Acid-Etched Standard and Platform-Switched Abutments"

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ABSTRACT.

Aim

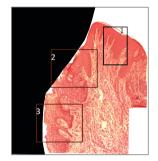
This study evaluated the histometric characteristics of the peri-implant mucosa of human subjects that received textured implant abutments with conventional (implant and abutment with same diameter) or platform-switched (implant diameter wider than that of the abutment) configurations.

Method and Materials

Ten healthy adult patients (three man, seven women; age range 25 to 58 years) were included in this study. Each patient received two endosseous dental implants of 4mm diameter (various lengths, internal hex; SEVEN®, MIS Implant Technologies). All sites for implant placement had an adequate zone of keratinized mucosa prior to surgical intervention. Radiographic and clinical evaluations were completed at the time of implant insertion and at 1, 3, 12, 16 and 24 weeks. Abutment connection was preformed approximately 6 months after implant insertion (5 to 7 months). Each patient received one conventional and one platform-switched abutment.

Results & Conclusions

Wider and longer connective tissue around platform–switched implants was observed compared to that with standard abutments. Despite the different dimensions between the two abutments types, similar abutment-soft tissue interaction was observed for both groups at the histometric level. Stratified squamous epithelium was observed at the free, marginal, and gingival sulcus regions (fig.1).



Gingival tissue around a grit-blasted standard implant abutment (hematoxylin-eosin, original magnification x 20)

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