

IMPLANTOPLASTY IN THE SURGICAL TREATMENT OF PERI-IMPLANTITIS: 1-YEAR FOLLOW-UP CASE SERIES

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Introduction:

Peri-implantitis is a biofilm-related disease characterized by soft tissues inflammation and bone resorption. Different surgical approaches associated to various decontamination methods were proposed. Implantoplasty usually consists of removing the implant threads and smoothing rough implant surfaces with rotary instruments and secondly making the affected implant surface less plaque-retentive.

Aims:

The aim of this study was to observe the clinical effects of implantoplasty applied in different surgical approaches as resective and regenerative surgery.

Methods:

Eleven patients with peri-implantitis were enrolled during a period of 36 months; the overall number of implants involved was 30. The surgical treatment was performed 8 weeks after non-surgical therapy. Implants with intrabony defects ≤ 4 mm were treated with resective surgical approach while with intrabony defects > 4 mm with a regenerative surgical approach. Implantoplasty was performed on the exposed implant surface of all implants. Probing depth, radiographic bone level and peri-implant soft tissues inflammation parameters were recorded in all patients six months, one year and then every 6 months after surgery.

Results:

Four implants in four different patients failed, two of them were treated with regenerative approach while the other two with resective approach. One year after surgery the remaining implants showed no signs of peri-implant inflammation, the mean probing depth was $3,22 \pm 1,07$ mm. 91% of the sites recorded probing depths (PD) ≤ 4 mm and the mean probing depth reduction was $2,66 \pm 2,48$ mm ($3,50 \pm 2,23$ mm for the regenerative approach and $2,20 \pm 2,52$ mm for the resective one). Furthermore, no negative side effects linked to the dispersion of metal filing were recorded.

Conclusions:

The association of implantoplasty and either a resective or a regenerative surgical approach in the treatment of peri-implantitis resulted in an improvement of all clinical parameters and seems to be a safe and effective treatment option.