NobelDirect® Implants

The NobelDirect® one-piece implant has a TiUnite® surface for bone and soft tissue contact. The implant design makes it possible to avoid manipulation of the soft tissue after initial healing. The abutment portion of the implant is preparable, which makes it possible to create an individualized preparation borderline that follows the anatomy of the soft tissue margin, without violating the soft tissue seal. Soft tissue in contact with the TiUnite® surface has been shown to result in a normal appearance of the periimplant mucosa and a functional epithelium attached to the surface\textsuperscript{1,2}. 

Case reports with excellent implant stability, esthetics and patient satisfaction in the short-term perspective have been published \textsuperscript{3,4}. Four maxillary one-piece implants placed immediately post extraction using a flapless surgical technique, and immediately provisionalised, have been evaluated after 12 months; a mean marginal bone loss of 0.50 mm, clinically preserved papillae, and optimal esthetic results were reported \textsuperscript{5}. In a study evaluating the peri-implant marginal bone levels in patients with maxillary partial edentulism \textsuperscript{6}, a mean bone loss of 0.27 mm during the first 9 months has been reported. Early clinical experience with NobelDirect® implants for the restoration of single tooth defects has been reported for an observation period of 2.5 to 32 months, during which one implant failure occurred, resulting in a survival rate of 97.8\% \textsuperscript{7}. Forty-seven consecutively placed implants in one clinic were followed for up to 3 years. One implant failed resulting in an overall survival rate of 97.9\%. The marginal bone level remained stable over time \textsuperscript{8,9}. In another single center study with 92 consecutively placed implants in 58 patients, no implant failure occurred. After a mean time of 17 months, healthy soft tissue conditions were present with the average bone level positioned at the first thread\textsuperscript{10}.

A retrospective evaluation of the clinical performance of the NobelDirect® implant was performed on 1009 consecutively placed implants in 25 clinics. The evaluation demonstrated an overall survival rate of 98.2\% with stable marginal bone levels over time \textsuperscript{11}.

Additional prospective multicenter studies\textsuperscript{12-14} are ongoing for further evaluation of the hard and soft tissue response to NobelDirect® implants; 1-year results from one of these studies demonstrate a mean marginal bone level slightly above the first thread and a 98.7\% cumulative implant survival rate \textsuperscript{12}. The 2-year results from this study show stable margin bone level and soft tissue health \textsuperscript{13}. 

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References


14. Clinical evaluation of NobelDirect implants diameter 3 mm. Ongoing study in four centers. Clinical Research Department, Nobel Biocare AB.