

Bacterial microleakage at the abutment-implant interface, in vitro study



AUTHORS AND PUBLICATION

Larrucea C, Aparicio C, Olivares D, Padilla C, Barrera A, Lobos O.
Clinical Implant Dentistry and Related Research 2018;1-8

OBJECTIVE

The objective of this study was to determine the presence of marginal bacterial microleakage at the All according to the torque applied to the prosthetic implant in vitro.

RESULTS

- » The perfect implant-abutment connection its extremely important to avoid bacterial microleakage, reduces the risk of periimplantitis and maintains the marginal bone level.
- » Twenty-five Ticare Inhex internal conical implants were connected to a prosthetic abutment (at different torques). Groups with 20 N and 30 N torque applied showed no bacterial leakage at any time during the experiment (observation by Micro CT of the frontal and horizontal sections). This reflects the recommendations of the manufacturer (30 N)

Does apico-coronal implant position influence peri-implant marginal bone loss? A 36-month follow-up randomized clinical trial



AUTHORS AND PUBLICATION

Pellicer H, Peñarrocha M, Aloy A, Canullo L, Peñarrocha M, Peñarrocha D.
Journal of Oral and Maxillofacial Surgery 2018;1-13

OBJECTIVE

The aim of this study was to compare peri-implant clinical and radiologic parameters after crestal and subcrestal dental implant placement at 36 months' follow-up.

RESULTS

- » The subcrestal implants significantly reduced (88%) rough surface exposure compared with the crestal implants.
- » Excellent maintenance of the level of marginal bone at three years around the Ticare Inhex implants, the subcrestals presented a marginal bone loss (MBL) of only 0,09 mm and the crestals of 0,29 mm
- » The overall success rate was 99,6%.
- » Independently of the study group, most of the Ticare Inhex implants showed evidence of peri-implant health after the 36 months of follow-up and no cases of peri-implantitis were recorded.

Diagnostic accuracy of the implant stability quotient in monitoring progressive peri-implant bone loss: An experimental study in dogs



AUTHORS AND PUBLICATION

Monje A, Insua A, Monje F, Muñoz F, Salvi GE, Buser D, Chappuis V. *Clinical Oral Implants Research* 2018;29:1016-24

OBJECTIVE

To investigate the impact of progressive bone loss in an experimental peri-implantitis model in the dog upon the implant stability quotient (ISQ) measured in the course of induced and spontaneous conditions of disease, and to evaluate the association between the clinical parameters and ISQ.

RESULTS

- » Statistically significant correlation was found between implant stability quotient and Marginal bone loss
- » Even with the marginal bone loss caused by peri-implantitis, the stability of the Ticare Inhex implant was high (greater than other implant brands in similar studies)

The critical peri-implant buccal bone wall thickness revisited: An experimental study in the beagle dog. 2019



AUTHORS AND PUBLICATION

Alberto Monje, DDS, MS, PhD1/Vivianne Chappuis, DDS, Dr Med Dent2/Florencio Monje, MD, PhD3/Fernando Muñoz, DVD, PhD4/Hom-Lay Wang, DDS, MS, PhD5/Istvan A. Urban, MD, PhD5/Daniel Buser, DDS, Dr Med Dent2. *The International Journal of Oral & Maxillofacial Implants* 2019, 34

OBJECTIVE

There is a lack of knowledge concerning the critical buccal bone thickness required for securing favorable functional and esthetic outcomes, conditioned to the dimensional changes after implant placement. A preclinical study was therefore carried out to identify the critical buccal bone wall thickness for minimizing bone resorption during physiologic and pathologic bone remodeling.

RESULTS

- » A critical buccal bone wall thickness of 1.5 mm at implant placement is advised, since a thicker peri-implant buccal bone wall (≥ 1.5 mm) is exposed to significantly less physiologic and pathologic bone loss compared with a thinner buccal bone wall (< 1.5 mm)
- » The study collects previous literature that set the minimum width of the buccal bone at 1,8 mm to avoid implant failure during osseointegration.
- » In this study it can be affirmed that the decrease in an ISQ unit represents 1,13 mm of MBL compared to previous studies that represented 0,43 mm of MBL.