

15 years of clinical success: single-tooth restoration with anodized implants

Clinical relevance

Implant survival

High implant cumulative survival rate of 97.4% after 15 years.

Stable bone

Minimal bone remodeling of -0.6 mm from prosthetic delivery to last follow-up.

Few complications

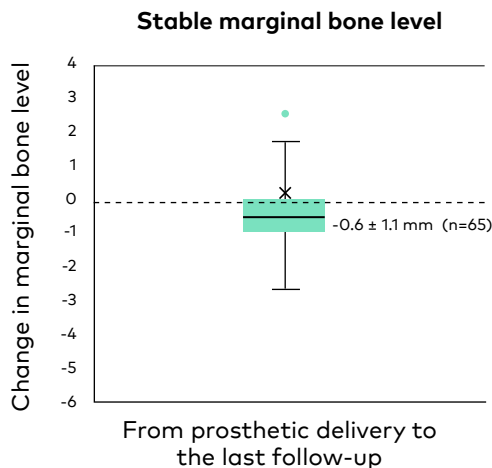
Low rate of peri-implantitis. The majority of implants showed no technical or biological complications.



Kowar J, Lund H, Stenport VF. Long-term performance of implants with moderately rough anodized surface supporting single-tooth restorations: A retrospective analysis with an up to 15-year follow-up. Clin Oral Implants Res.2023;34(4):367-377

The results

- Of 129 TiUinite surface implants, two implants failed in the first year and one after 14.8 years.
- Mean marginal bone loss from prosthetic delivery to the last follow-up was -0.6 ± 1.1 mm (n = 65).
- No technical and no biological complications at 81.4%, and 70.5% of implants, respectively.
- Only 12 out of 129 implants (9.3%) were classified as having peri-implantitis, despite the very stringent definition of the disease.*



* Bone loss of over 0.5 mm from loading to 15 years, with pus and/or sulcus bleeding.

Study design

Retrospective clinical study



97 patients



Single-tooth restoration, delayed loading



129 TiUinite® surface implants



67 cement-retained and 54 screw-retained restorations



13.4 ± 4.8 years follow-up

Sample clinical case from the study

Initial clinical situation

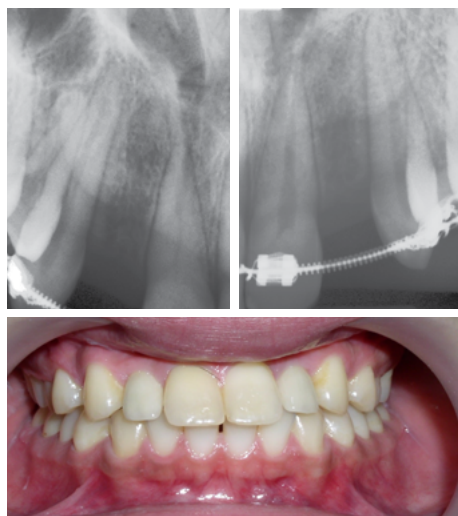
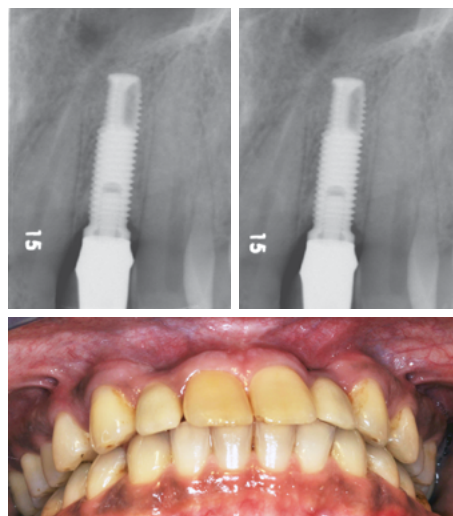


Image courtesy of Dr. Jan Kowar, Sweden

15 years



The patient was treated for aplasia in positions 12 and 22 (FDI system). TiUnite surface implants were placed using a 2-stage approach and restored with cement-retained implant crowns. After 15 years of function, marginal peri-implant bone levels remained stable and soft tissue was healthy.

Authors' conclusion

"Moderately rough anodized implants [TiUnite®] have shown favorable long-term outcomes in single-tooth indication, with high survival and a low rate of technical complications."

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Blog: Interview with
Dr. Jan Kowar



Case: Restoration of
central maxillary incisor,
7-year follow-up

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