

## LITERATUR

**Ausgabe:** Implantologie Journal 7+8/20

**Thema:** Zirkonoxidimplantate im klinischen Einsatz – Ergebnisse komparativer Studien

**Autorin:** Dr. Elisabeth Jacobi-Gresser

---

1. Al-Ahmad A, Wiedmann-Al-Ahmad M, Fackler A, Follo M, Hellwig E, Bächle M, Hannig C, Han JS, Wolkewitz M, Kohal R (2013). In vivo study of the initial bacterial adhesion on different implant materials. Archives of Oral Biology; 58:1139-47.
2. Balmer M, Spies BC, Vach K, Kohal R, Hämmerle CHF, Jung RE (2017): Three- year analysis of zirconia implants used for single-tooth replacement and three-unit fixed dental prostheses: A prospective multicenter study. Clin Oral Impl Re.s
3. Becker M, Quabius S, Kewitz T, Hansen L, Becker G, Kern M, Kersten H, Harder S (2019), In vitro proinflammatory gene expression changes in human whole blood after contact with plasma-treated implant surfaces, Journal of Cranio-Maxillofacial Surgery, <https://doi.org/10.1016/j.jcms.2019.05.004>.
4. Beger B, Goetz H, Morlock M, Schiegnitz E, Al-Nawas B (2018): *In vitro* surface characteristics and impurity analysis of five different commercially available dental zirconia implants. Int J Implant Dent.
5. Scarano A et al. (2004): Bacterial adhesion on commercially pure titanium and zirconium oxide disks: an in vivo human study. J Periodontol.
6. Bosshardt DD, Chappuis V, Buser D (2017): Osseointegration of titanium, titanium alloy and zirconia dental implants: current knowledge and open questions. Periodontology 2000, Vol. 73,22-40.
7. Daubert D, Pozhitkov A, McLean J, Kotsakis G (2018): Titanium as a modifier of the peri-implant microbiome structure. Clin Impl Dent Relat Res.
8. Degidi M, Artese L, Scarano A, et al. (2006): Inflammatory infiltrate, microvessel density, nitric oxide synthase expression, vascular endothelial growth factor expression, and proliferative activity in peri-implant soft tissue around titanium and zirconium healing caps. J Periodontol.
9. Derks J, Tomasi C (2014): Peri-implant health and diseases. A systematic review of current epidemiology. J Clin Periodontol 2014.
10. Holländer J, Lorenz J, Stübinger S, Hölscher W, Heidemann D, Ghanaati S, Sader R.I. (2016): Zirconia Dental Implants: Investigation of Clinical Parameters, Patient Satisfaction, and Microbial Contamination. Int J Oral Maxillofac Implants. Jul-Aug; 31(4):855-64.
11. Jacobi-Gresser E, Huesker K, Schütt S (2013): Genetic and immunological markers predict titanium implant failure: a retrospective study. Int J Oral Maxillofac Surg; 42(4):537-43 .
12. Jacobi-Gresser E, Domingo M, Tasat D, Paparella ML, Olmedo DG (2018): Oral Mucosa Response to Zirconia Dental Implants. A Pilot Study. J Dent Res 97 (Spec Iss B): 0958ä.
13. Jacobi-Gresser E, Schütt S: Comparative splitmouth-study of periodontal markers at healthy teeth, titanium and zirconia implants. paper in preparation.

14. Jacobi-Gresser E, Domingo MG, Renou S, Steimetz T, Tasat DR, Paparella ML, Olmedo DG (2019). Tissue response to zirconia dental implants: A murine experimental study. IADR .
15. Kohal R, Vach K, Balmer M, Butz F, Spies B (2017): Alumina-toughened zirconia oral implants are successful over 5 years. A prospective investigation. Conference paper.
16. Liñares A, Grize L, Munoz F, Pippenger BE, Dard M, Domken O, Blanco-Carrión (2016): Histological Assessment of Hard and Soft Tissues Surrounding a Novel Ceramic Implant: A Pilot Study in the Minipig. J Clin Periodontol.
17. Market Research Future (2017) Dental Implants Market Research Report - Global Forecast to 2022.
18. Merino JJ, Cabana-Muñoz ME, Gasca AT, Garcimatin A, Benedi J, Camacho-Alonso F, Parmigiani-Izquierdo JM (Sept. 2019): Elevated Systemic L-Kynurenine/L-Thryptophan Ratio and Increased IL-1 Beta and Chemokine (CX3CL1, MCP-1) Proinflammatory Mediators in Patients with Long-Term Titanium Dental Implants. J Clin Med.
19. Olmedo DG, Tasat D, Evelson P, Rebagliatti R, Guglielmotti MB, Cabrini RL (2011): In vivo comparative biokinetics and biocompatibility of titanium and zirconium microparticles. J Biomed Mater Res A 2011.
20. Olmedo DG, Paparella ML, Spielberg M, Brandizzi D, Guglielmotti MB, Cabrini RL (2012). Oral mucosa tissue response to titanium cover screws. J Periodontol; 83(8):973-80.
21. Paparella ML, Domingo MG, Puia SA, Jacobi-Gresser E, Olmedo DG. Titanium dental implant-related pathologies: a retrospective study. (submitted).
22. Pajarinen J, Kouri VP, Jämsen E, Li TF, Mandelin J, Kontinen YT (2013): The response of macrophages to titanium particles is determined by macrophage polarization. Acta Biomater 9(11):9229-40.
23. Pettersson M, Kelk P, Belibasakis GN, Bylund D, Molin Thoren M, Johansson A (2017): Titanium ions form particles that activate and execute interleukin-1beta release from lipopolysaccharide-primed macrophages. J Periodontal Res.
24. Pieralli S, Kohal RJ, Jung RE, Vach K, Spies BC (2017): Clinical Outcomes of Zirconia Dental Implants: A Systematic Review. J Dent Res.
25. Rimondini L, Cerroni L, Carrassi A et al. (2002): Bacterial colonization of zirconia ceramic surfaces: an in vitro and in vivo study. Int J Oral Maxillofac Implants
26. Roehling S, Woelfler H, Hicklin S, Kniha H, Gahlert M (2016): A Retrospective Clinical Study with Regard to Survival and Success Rates of Zirconia Implants up to and after 7 Years of Loading. Clin Impl Dent Relat Res.
27. Roehling S, Astasov-Frauenhoffer M, Hauser-Gerspach I, Braissant O, Woelfler H, Waltimo T, Kniha H, Gahlert M (2017): In Vitro Biofilm Formation on Titanium and Zirconia Implant Surfaces. J Periodontol 88: 298-307.
28. Safiotti LM, Kotsakis GA, Alex E, Pozhitkov AE, Chung WO, Daubert DM (2017): Increased Levels of Dissolved Titanium Are Associated with Peri-Implantitis – A Cross-Sectional Study. J Periodontol Vol. 88, No. 5, Pages 436-442.
29. Scherrer SS, Mekki M, Crottaz C, Gahlert M, Romelli E, Marger L, Durual S, Vittecoq E (2018): Translational research on clinically failed zirconia implants. Dent Mater.
30. Scridhar S, Wilson Jr TG, Palmer KL, Valderrama P, Mathew MT, Prasad S, Jacobs M, Gindri IM, Rodrigues DC (2015): In Vitro Investigation of the Effect of Oral Bacteria in the Surface Oxidation of Dental Implants. Clin Impl Dent; 17:562-75.

31. Spies BC, Fross A, Adolfsson E, Bagegni A, Doerken S, Kohal R (2018): Stability and aging resistance of a zirconia oral implant using a carbon fiber-reinforced screw for implant-abutment connection. Dent Mater.
32. Thoma DS, Ioannidis A, Cathomen E, Hämmerle CH, Hüsler J, Jung RE (2016): Discoloration of the peri-implant mucosa caused by zirconia and titanium implants. Int J Period Rest Dent.