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Title: Metal-free rehabilitation of the posterior mandible using ceramic implants

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References

1. Andreiotelli M, Wenz HJ, Kohal RJ. Are ceramic implants a viable alternative to titanium implants? A systematic literature review. *Clin Oral Implants Res.* 2009;20 Suppl 4:32–47.
2. Scarano A, Piattelli M, Caputi S, Favero GA, Piattelli A. Bacterial adhesion on commercially pure titanium and zirconium oxide disks. *J Periodontol.* 2004;75(2):292–6.
3. Kohal RJ, Att W, Bächle M, Butz F. Ceramic abutments and ceramic oral implants. *Periodontol 2000.* 2008;47:224–43.
4. Osman RB, Swain MV. A critical review of dental implant materials with an emphasis on titanium versus zirconia. *Materials (Basel).* 2015;8(3):932–58.
5. Payer M, Heschl A, Koller M, Arnetzl G, Lorenzoni M. All-ceramic restoration of zirconia two-piece implants—a clinical report. *Int J Oral Maxillofac Implants.* 2015;30(2):e11–5.
6. Roehling S, Astasov-Frauenhoffer M, Hauser-Gerspach I, et al. In vitro biofilm formation on titanium and zirconia implant surfaces. *J Periodontol.* 2017;88(3):298–307.
7. Linkevicius T, Apse P. Influence of abutment material on stability of peri-implant tissues: a systematic review. *Int J Oral Maxillofac Implants.* 2008;23(3):449–56.
8. Kohal RJ, Spies BC, Vach K, Balmer M. Alumina-reinforced zirconia implants: survival rate and fracture strength. *Clin Oral Implants Res.* 2010;21(12):1343–8.
9. Spies BC, Sauter C, Wolkewitz M, Kohal RJ. Alumina-reinforced zirconia implants: effects of cyclic loading and abutment modification on fracture resistance. *Dent Mater.* 2015;31(3):262–72.
10. Spies BC, Balmer M, Patzelt SB, Vach K, Kohal RJ. Alumina-toughened zirconia implants: 1-year results from a prospective cohort investigation. *Clin Oral Implants Res.* 2016;27(4):481–7.
11. Choukroun J, Adda F, Schoeffler C, Vervelle A. PRF: an opportunity in perio-implantology. *Implantodontie.* 2001;42:55–62.