

# **Update: Rationaler Antibiotikaeinsatz in der Parodontitis-Therapie**

**Dr. Sylke Dombrowa**

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1. Amano A: Host-parasite interactions in periodontitis: microbial pathogenicity and innate immunity. *Periodontology 2000* 54, 9–14 (2010).
2. Bastendorf K: Paradigmenwechsel im Biofilmmmanagement. *PNC* 8 (1), 6–11 (2014).
3. Beikler T., et al.: Wissenschaftliche Stellungnahme DGZMK: Adjuvante Antibiotika in der Parodontitistherapie. *DZZ* (2003).
4. Bhullar K, Waglechner N, Pawlowski A, Koteva K, Banks ED, Johnston MD, Barton HA, Wright GD: Antibiotic resistance is prevalent in an isolated cave microbiome. *PLoS ONE* 7 (4): e34953 (2012).
5. Brauer HU, Manegold-Brauer G, Beikler T, Klocke A: Zahnärztliche Medikation während der Schwangerschaft und in der Stillzeit. *Quintessenz* 68 (7), 815–822 (2017).
6. Brown MRW, Gilbert P: Sensitivity of biofilms to antimicrobial agents. *J Appl Bacteriol* 74 (S22), 87–97 (1993).
7. Bruckmann C, Gregor R, Müller W: Kompendium der parodontalen Erkrankungen. Grundlagen, Diagnostik, Therapie und Risikofaktoren. ÖGP (2005).
8. Colombo AP, Boches SK, Cotton SL, Goodson JM, Kent R, Haffajee AD, Socransky SS, Hasturk H, Thomas E, Van Dyke TE, Paster B: Comparisons of subgingival microbial profiles of refractory periodontitis, severe periodontitis and periodontal health using the human oral microbe identification microarray (HOMIM). *J Periodontol* 80 (9), 1421–1432 (2009).
9. Costerton JW, Cheng K-J, Geesey GG, Ladd TI, Nickel JC, Dasgupta M, Marrie TJ: Bacterial biofilms in nature and disease. *Ann Rev Microbiol* 41, 435–464 (1987).
10. Costerton JW, Lewandowski Z, Caldwell DE, Korber DE, Lappin-Scott HM: Microbial biofilms. *Annu Rev Microbial* 49, 711–745 (1995).
11. D'Costa VM, King CE, Kalan L, Morar M, Sung WWL, Schwarz C, Froese D, Zazula G, Calmels F, Debruyne R, Golding GB, Poinar HN, Gerard D, Wright GD: Antibiotic resistance is ancient. *Nature* 477, 457–461 (2011).
12. Diaz PI, Hoare A, Hong BY: Subgingival microbiome shifts and community dynamics in periodontal diseases. *CDA Journal* 44 (7), 421–435 (2016).
13. Dombrowa S: Sinnhaftigkeit der mikrobiologischen Diagnostik in der Therapie von Parodontitis und Periimplantitis. *ZMK* 7/8, 422–426 (2010).
14. ECDC. Last-line antibiotics are failing, press release. <https://ecdc.europa.eu/en/news-events/last-line-antibiotics-are-failing>. (2016).

15. Eick S, Seltmann T, Pfister W: Efficacy of antibiotics to strains of periodontopathogenic bacteria within a single species biofilm – an in vitro study. *J Clin Periodontol* 31, 376–383 (2004).
16. EU-Komission Deutschland: EU geht gegen resistente, gefährliche Keime vor. [https://ec.europa.eu/germany/news/eu-geht-gegen-resistente-gef%C3%A4hrliche-keime-vor\\_de](https://ec.europa.eu/germany/news/eu-geht-gegen-resistente-gef%C3%A4hrliche-keime-vor_de). (2017).
17. Ezzo P, Cutler CW: Microorganisms as risk indicators for periodontal disease. *Periodontol* 2000, 32, 24–35 (2003).
18. Folwaczny M, Hickel R: Biofilm – Problem oder Perspektive? *DZZ* 58 (12), 648–659 (2003).
19. **G20-Gesundheitsministertreffen.** Gemeinsam Pandemien verhindern. <https://www.bundesregierung.de/Content/DE/Artikel/2017/05/2017-05-19-g20-gesundheitsministertreffen.html>. (2017).
20. Haffajee AD, Socransky SS, Gunsolley JC: Systemic anti-infective periodontal therapy. A systemic review. *Ann Periodontol* 8 (1), 115–181 (2003).
21. Halling F: Polypharmakotherapie: Zu Risiken und Nebenwirkungen. *MBZ* 02, 10–16 (2015).
22. Hernichel-Grobach E: Subgingivales Scaling im Rahmen des Biofilmmanagements. *Parodontologie* 19 (3), 219–232 (2008).
23. Herrera D, Alonso B, Léon R, Roldán S, Sanz M: Antimicrobial therapy in periodontitis: the use of systemic antimicrobials against the subgingival biofilm. *J Clin Periodontol* 35 (8), 45–66 (2008).
24. Höffler D, Stahlmann R: Unerwünschte Wirkungen und Risiken von Fluorchinolonen. *Dtsch Arztebl* 97 (45), A-3022 / B-2553 / C-2272 (2000).
25. Hong B-Y, Furtado Araujo MV, Strausbaugh LD, Terzi E, Ioannidou E, Diaz PI: (Microbiome profiles in periodontitis in relation to host and disease characteristics. *PLoS ONE* 10 (5), 1–14 (2015).
26. Jaroch M, Kielbassa AM: Der dentale Biofilm – Voraussetzung dentaler und parodontaler Erkrankung. *Dentalhygiene Journal* (2), 10–14 (2009).
27. KVBW: Antibiotikatherapie in der Praxis/Verordnungsforum 36, November 2015.
28. Kilian M, Chapple IL, Hannig M, Marsh PD, Meuric V, Pedersen AML, Tonetti MS, Wade WG, Zaura E: The oral microbiome – an update for oral healthcare professionals. *British Dental Journal* 10, 657–666 (2016).
29. Labriola A, Needleman I, Moles DR: Systematic review of the effect of smoking on nonsurgical periodontal therapy. *Periodontology 2000* 37, 124–137 (2005).
30. Lewis K: Riddle of biofilm resistance. Minireview. *Antimicrobial Agents and Chemotherapy* 45 (4), 999–1007 (2001).

31. Marsh PD: Microbial ecology of dental plaque and its significance in health and disease. *Adv Dent Res* 8 (2), 263–271 (1994).
32. Marsh PD, Zaura E: Dental biofilm: ecological interactions in health and disease. *J Clin Periodontol* 44 (Suppl. 18), 12–22 (2017).
33. Paster BJ, Olsen I, Aas JA, Dewhirst FE: The breadth of bacterial diversity in the human periodontal pocket and other oral sites. *Periodontology 2000* 42, 80–87 (2006).
34. Position Paper: Systemic antibiotics in periodontics. *J Periodontol* 75, 1553–1565 (2004).
35. Positionspapier der Kommission ART zu infektiologischen Leitlinien. [http://www.rki.de/DE/Content/Kommissionen/ART/Positionspapier/Positionspapier\\_Leitlinien-in-der-Infektionsmedizin.html](http://www.rki.de/DE/Content/Kommissionen/ART/Positionspapier/Positionspapier_Leitlinien-in-der-Infektionsmedizin.html).
36. Quirynen M, Mongardini C, Pauwels M, Bollen CML, van Elderle J, van Steenberghe D: One stage full- versus partial-mouth disinfection in the treatment of chronic adult or generalized early-onset periodontitis. II. Long-term impact on microbial load. *J Periodontol* 70, 646–656 (1999).
37. Socransky SS, Haffajee AD, Cugini MA, Smith C, Kent RL: Microbial complexes in subgingival plaque. *J Clin Periodontol* 25, 134–144 (1998).
38. Socransky SS, Smith C, Haffajee AD: Subgingival microbial profiles in refractory periodontal disease. *J Clin Periodontol* 29, 260–268 (2002).
39. Stewart PS, Costerton WJ: Antibiotic resistance of bacteria in biofilms. *The Lancet* 58 (3), 135–138 (2001).
40. Taylor J, Pemberton MN: Antibiotics and oral contraceptives: new considerations for dental practice. *Brit Dent Journal* (10), 481–483 (2012).
41. Van Winkelhoff AJ, Winkel EG: Microbiological diagnostics in periodontics: biological significance and clinical validity. *Periodontology 2000* 39, 40–52 (2005).