

Innovative Ansätze in der Kariestherapie

Dr. Anna Felten, Prof. Dr. Diana
ZMK 5 (33), S. 310-317

1. Aamdal-Scheie, A., Luan, W.M., Dahlen, G., and Fejerskov, O. (1996). Plaque pH and microflora of dental plaque on sound and carious root surfaces. *Journal of dental research* 75, 1901-1908.
2. Aas, J.A., Griffen, A.L., Dardis, S.R., Lee, A.M., Olsen, I., Dewhirst, F.E., Leys, E.J., and Paster, B.J. (2008). Bacteria of dental caries in primary and permanent teeth in children and young adults. *J Clin Microbiol* 46, 1407-1417.
3. Becker, M.R., Paster, B.J., Leys, E.J., Moeschberger, M.L., Kenyon, S.G., Galvin, J.L., Boches, S.K., Dewhirst, F.E., and Griffen, A.L. (2002). Molecular analysis of bacterial species associated with childhood caries. *J Clin Microbiol* 40, 1001-1009.
4. Belda-Ferre, P., Alcaraz, L.D., Cabrera-Rubio, R., Romero, H., Simon-Soro, A., Pignatelli, M., and Mira, A. (2012). The oral metagenome in health and disease. *ISME J* 6, 46-56.
5. Chunxiao, C., Keyu, J., Yuanyuan, M., Sa, Z., Jianye, Z., Zhiqiang, L., and Xiangyi, H. (2016). [Biological characteristics of a human specifically targeted antimicrobial peptide C16LL-37 against *Streptococcus mutans*]. *Hua xi kou qiang yi xue za zhi = Huaxi kouqiang yixue zazhi = West China journal of stomatology* 34, 295-301.
6. Eckert, R., He, J., Yarbrough, D.K., Qi, F., Anderson, M.H., and Shi, W. (2006a). Targeted killing of *Streptococcus mutans* by a pheromone-guided "smart" antimicrobial peptide. *Antimicrobial agents and chemotherapy* 50, 3651-3657.
7. Eckert, R., Qi, F., Yarbrough, D.K., He, J., Anderson, M.H., and Shi, W. (2006b). Adding selectivity to antimicrobial peptides: rational design of a multidomain peptide against *Pseudomonas* spp. *Antimicrobial agents and chemotherapy* 50, 1480-1488.
8. Eckert, R., Sullivan, R., and Shi, W. (2012). Targeted antimicrobial treatment to re-establish a healthy microbial flora for long-term protection. *Advances in dental research* 24, 94-97.
9. Gross, E.L., Beall, C.J., Kutsch, S.R., Firestone, N.D., Leys, E.J., and Griffen, A.L. (2012). Beyond *Streptococcus mutans*: dental caries onset linked to multiple species by 16S rRNA community analysis. *PLoS One* 7, e47722.
10. Guo, L., McLean, J.S., Yang, Y., Eckert, R., Kaplan, C.W., Kyme, P., Sheikh, O., Varnum, B., Lux, R., Shi, W., *et al.* (2015). Precision-guided antimicrobial peptide as a targeted modulator of human microbial ecology. *Proceedings of the National Academy of Sciences of the United States of America* 112, 7569-7574.

11. Hamada, S., and Slade, H.D. (1980). Biology, immunology, and cariogenicity of *Streptococcus mutans*. *Microbiol Rev* 44, 331-384.
12. He, J., Anderson, M.H., Shi, W., and Eckert, R. (2009). Design and activity of a 'dual-targeted' antimicrobial peptide. *International journal of antimicrobial agents* 33, 532-537.
13. He, J., Yarbrough, D.K., Kreth, J., Anderson, M.H., Shi, W., and Eckert, R. (2010). Systematic approach to optimizing specifically targeted antimicrobial peptides against *Streptococcus mutans*. *Antimicrobial agents and chemotherapy* 54, 2143-2151.
14. IHME (2016). Rethinking Development and Health: Findings from the Global Burden of Disease Study (Seattle, Washington Institute for Health Metrics and Evaluation).
15. Jordan, M., Micheelis, W., Cholmakow-Bodechtel, C., Füßl-Grünig, E., Geyer, S., Hertrampf, K., Hoffmann, T., Holtfreter, B., Kocher, T., Micheelis, W., *et al.* (2016). Fünfte Deutsche Mundgesundheitsstudie (DMS V) - Kurzfassung (Berlin/Köln).
16. Kaplan, C.W., Sim, J.H., Shah, K.R., Kolesnikova-Kaplan, A., Shi, W., and Eckert, R. (2011). Selective membrane disruption: mode of action of C16G2, a specifically targeted antimicrobial peptide. *Antimicrobial agents and chemotherapy* 55, 3446-3452.
17. Kassebaum, N.J., Smith, A.G.C., Bernabé, E., Fleming, T.D., Reynolds, A.E., Vos, T., Murray, C.J.L., Marcenes, W., and Collaborators, a.G.O.H. (2017). Global, Regional, and National Prevalence, Incidence, and Disability-Adjusted Life Years for Oral Conditions for 195 Countries, 1990-2015: A Systematic Analysis for the Global Burden of Diseases, Injuries, and Risk Factors. *Journal of dental research* 96, 380-387.
18. Li, L.N., Guo, L.H., Lux, R., Eckert, R., Yarbrough, D., He, J., Anderson, M., and Shi, W.Y. (2010). Targeted antimicrobial therapy against *Streptococcus mutans* establishes protective non-cariogenic oral biofilms and reduces subsequent infection. *International journal of oral science* 2, 66-73.
19. Loesche, W.J. (1986). Role of *Streptococcus mutans* in human dental decay. *Microbiol Rev* 50, 353-380.
20. Marsh, P.D. (1994). Microbial ecology of dental plaque and its significance in health and disease. *Advances in dental research* 8, 263-271.
21. Marsh, P.D. (2010). Microbiology of dental plaque biofilms and their role in oral health and caries. *Dent Clin North Am* 54, 441-454.
22. Smith, E.G., and Spatafora, G.A. (2012). Gene regulation in *S. mutans*: complex control in a complex environment. *Journal of dental research* 91, 133-141.

23. Sullivan, R., Santarpia, P., Lavender, S., Gittins, E., Liu, Z., Anderson, M.H., He, J., Shi, W., and Eckert, R. (2011). Clinical efficacy of a specifically targeted antimicrobial peptide mouth rinse: targeted elimination of *Streptococcus mutans* and prevention of demineralization. *Caries research* 45, 415-428.

24. Tanzer, J.M., Livingston, J., and Thompson, A.M. (2001). The microbiology of primary dental caries in humans. *J Dent Educ* 65, 1028-1037.