

## Literaturliste

### **Photodynamische Therapien - Blau versus Grün**

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1. Iwase T, Saito T, Nara Y, Morioka T: Inhibitory effekts of NeHe-laser on dental plaque deposition in Hamsters; *J Periodont Res* 24, 282 – 283 (1989)
2. Braun A, Dehn C, Krause F, Jepsen S: Antimikrobielle Photodynamische Therapie (aPDT) bei der parodontalen behandlung; *Quintessenz Team-Journal* 37, 63 - 68 (2007)
3. Hopp M, Biffar R: Antibakterielle photodynamische Therapie und Softlaser-behandlung; *Zahn Prax* 11 (4), 258 – 266 (2008)
4. Sigusch BW, Völpel A, Pfister W: Wirksamkeit der photodynamischen Therapie bei klinischen Entzündungszeichen des Parodons und dem Nachweis parodontalpathogener Bakterienspezies – Ein Fallbericht; *Parodontologie* 18, 229 – 238 (2007)
5. De Oliveira RR, Schwartz-Filho HO, Novaes jr AB, Taba jr M: Antimicrobial photodynamic therapy in the non-surgical treatment of aggressive periodontitis: a preliminary randomized controlled clinical study; *J Periodontol* 78, 965 – 973 (2007)
6. Wilson M, Dobson J, Harvey W, Sensitization of oral bacteria to killing by low-power laser radiation; *Curr Microbiol* 25, 77 – 81 (1992)
7. Wilson M, Burns T, Pratten J, Pearson GJ: Bacteria in supragingival plaque samples can be killed by low-power laser in the presence of a photosensitizer; *J Appl Bacteriol* 78, 569 – 574 (1995)
8. Hopp M: Möglichkeiten der Parodontalbehandlung: Teil 5: Nachsorge und Erhaltungsbehandlungen; *Dent Implantol* 15 (8), 494 – 505 (2011)
9. Dörtnedel-Kneissl E, Dörtnedel O, Bernhart D, Haas R, Mailath-Pokorny G: Die photodynamische Therapie zur Keimreduktion bei parodontalen Erkrankungen; *Stomatologie März* 97(1), 1-4 (2000)
10. Komerik N, Nakanishi H, MacRobert AJ, Henderson B, Speight P, Wilson M: In vivo killing of Porphyromonas gingivalis by toluidine blue-mediated photosensitization in an animal model; *Antimicrob Agents Chemother* 47, 932 – 40 (2003)
11. Brink B, Romanos GE: Mikrobiologische Untersuchungen bei adjuvanter Laseranwendung in der Parodontologie; *LaserZahnheilkunde* 4, 37 – 42 (2007)
12. Brink B, Romanos GE: Laseranwendung in der Parodontaltherapie – Klinische Daten einer Untersuchung aus der freien Praxis; *LaserZahnheilkunde* 4, 165 – 171 (2007)
13. Chan Y, Lai CH: Bactericidal effects of different laser wavelengths on periodontopathic germs in photodynamic therapy; *Lasers Med Sci* 18, 51 – 55 (2003)
14. Rühling A, Fanghänel J, Houshmand M, Kuhr A, Meisel P, Schwan C, Kocher T: Photodynamic therapy of persistend pockets in maintenance patients – a clinical study; *Clin Oral Invest* 14, 637 – 644 (2010)
15. Griffiths GS, Ayob R, Guerrero A, Nibali L, Suvan J, Moles DR, Tonetti MS: Amoxicillin and metronidazole as an adjunctive treatment in generalized aggressive

periodontitis at initial therapy or re-treatment: a randomized controlled clinical trial; *J Clin Periodontol* 38 (1), 43 – 49 (2011)

16. Loesche WJ, Grossman N, Giordano J: Metronidazole in periodontitis (IV). The effect of patient compliance on treatment parameters; *J Clin Periodontol.* 20(2):96-104 (1993)
17. Hägi TT, Sculean A: Neue erkenntnisse zur photodynamischen Parodontaltherapie: *Zahn Prax* 15 (6), 30 – 363 (2012)
18. El Yazami H, Zeinoun T, Bou Saba S, Lamard L, Peremans A, Limme M, Geerts S, Lamy M, Nammour S: Pulp temperature increase during photo-activated disinfection (PAD) of periodontal pockets: an in vitro study; *Lasers Med Sci* 25 (6), 655 – 659 (2010)
19. Neumann-Wedekind J: Zum Begriff „Delegieren“ im Zahnheilkundegesetz; *MedR*, 397 – 400 (1997)
20. Karu TI: Molecular mechanism of the therapeutic effect of low intensity laser irradiation; *Lasers in the Live Sciences* 2, 53 – 74 (1988)
21. Wilden L, Karthein R: Import of radiation phenomena of electrons and therapeutic low-level laser in regard to the mitochondrial energy transfer; *J Clin Laser Med Surg* 16, 159-165. (1998)
22. Bosatra M, Jucci A, Olliano P et al.: In vitro fibroblast and dermis fibroblast activation by laser irradiation at low energy; *Dermatologica* 168, 157 – 162 (1984)
23. Tocco G, Le Borgne De Kaouel C, Aubert C: HeNe and I.R. mid-laser influences in skin cells in vitro-preliminary results; *Proceedings Int Congress Lasers Medicine Surg*, p. 175 – 182 (1985)
24. Boulton M, MarshallJ: He-Ne laser stimulation of human fibroblast proliferation and attachment in vitro; *Lasers in Live Sciences* 1, 125 – 134 (1986)
25. Lingohr T: Wurzelspitzenresektion unter ausgewählter Therapie ; *Laser J* 12(1) p. 20 – 23 (2009)
26. Neugebauer J, Josza M, Kübler A: Die antimikrobielle photodynamische therapie zur Prävention der alveolären Ostitis und des Dolor post extractionem; *Mund Kiefer Gesichts Chir* 8, 350 – 355 (2004)
27. Conrad T: Komplikationsvermeidung bei Augmentation infizierter Alveolen; *Dent Implantol* 16(7), 546 – 551 (2012)
28. Nagayoshi M, Nishihara T, Nakashima K, Iwaki S, Chen KK, Terashita M, Kitamura C: Bactericidal effects of diode Laser irradiation on Enterococcus faecalis using periapical lesion defect Model: ISRN Dentistry, Article ID 870364, Vol 2011
29. Guzzardella GA, Fini M, Torricelli P, Giavaresi G, Giardino R: Laser stimulation on bone defect healing: An in vitro study; *Lasers Med Sci* 17, 216 – 220 (2002)
30. Trelles MA, Mayayo E: Bone fracture consolidates faster with low-power laser: *Lasers Surg Med* 7, 36 – 45 (1987)
31. Barushka O, Yaakobi T, Oron U: Effect of low energy laser (HeNe) irradiation on the process of bone repair in the rat tibia; *Bone* 16, 47 – 55 (1995)
32. Yaakobi T, Maltz L, Oron U: Promotion of bone repair in the cortical bone of the tibia in rats by low-energy laser (Ne-He) irradiation; *Calcif Tissue Int* 59 (4), 297 – 300 (1996)
33. Nammour S, Zeinoun T, Bogaerts I, Lamy M, Geerts SO, Bou Saba S, Lamard L, Peremans A, Limme M,: Evaluation of dental pulp temperature rise during photo-

- activated decontamination (PAD) of caries: an in vitro study; Lasers Med Sci 25 (6), 651 – 654 (2010)
34. Rodrigues de Sant'anna G, dos Santos EAP, Soares LES, do Esperito Santo AM, Martin AA, Duarte DA, Pacheco-Soares C, Brugnera jr A: Dental enamel irradiated with infrared diode laser and photoabsorbing cream: Part 1 – FT-Raman Study; Photomed Las Surg 27(3), 499 – 507 (2009)
35. McNally KM, Gillings BRD, Dawes JM: Dye-assisted diode laser ablation of carious enamel and dentine; Austral Dent J 44 (3), 169 – 175 (1999)
36. Zolfaghari PS, Packer S, Singer M, Nair SP, Bennett J, Street C, Wilson M: In vivo killing of staphylococcus aureus using a light-activated antimicrobial agent; DMC Microbiology 9, 27 – (2009)
37. Dai T, Bil de Arce VJ, Tegos GP, Hamblin MR: Blue Dye and Red Light, a Dynamic Combination for Prophylaxis and Treatment of Cutaneous Candida albicans Infections in Mice; Antimicrob Agents Chemother. 55(12), 5710 – 5717 (2011)
38. Friedberg JS, Skema C, Baum ED, Burdick J, Vinogradov SA, Wilson DF, Horan AD, Nachamkin I: In vitro effects of photodynamic therapy on Aspergillus fumigatus; J Antimicrob Chemother 48, 105 – 107 (2001)
39. Vlahova AP, Kisov CK, Popova EV, Haydushka EA, Mantareva VN: A new method for photodynamic disinfection of prosthetic constructions and impressions in prosthetic dentistry; Folia Medica 54(1), 51 - 57 (2012)
40. Toth J, Huthmann S, Arentz J, Hollerrieder J: Eosinophile ulcerierende Dermatitis: Die Behandlung mittels photodynamischem Laser; Pferde Spiegel 4/2008, 1 – 5 (2008)
41. George S, Hamblin MR, Kishena A: Uptake pathways of anionic and cationic photosensitizers into bacteria; Photochem Photobiol Sci 8, 788–795 (2009)
42. <http://de.wikipedia.org/wiki/Methylenblau>
43. <http://de.wikipedia.org/wiki/Toluidinblau>
44. Bolboaca M, Iliescu T, Kiefer W: Infrared absorption, Raman, and SERS investigations in conjunction with theoretical simulations on a phenothiazine derivative; Chemical Physics 298, 87 – 95 (2004)
45. Arentz J: Paradigmenwechsel in der PAR-Therapie?; DZW Spezial · Ausgabe 6/09 vom 9.12.2009
46. Bäumler W, Abels C, Karrer S, Weiß T, Messmann H, Landthaler M, Szeimies RM: Photo-oxidative killing of human colonic cancer cells using indocyanine green and infrared light; British J Cancer 80 (3/4), 360–363 (1999)
47. Abels C, Fickweiler S, Weiderer P, Bäumler W, Hofstädter F, Landthaler M, Szeimies RM: Indocyanine green (ICG) and laser irradiation induce photooxidation; Arch Dermatol Res 292, 404 – 411 (2000)
48. Landsman MLJ, Kwant G, Mook GA, Zijlstra WG: Light- absorbing properties, stability, and spectral stabilization of indocyanine green; J Appl Physiol 40, 575-583 (1976)
49. Engel E, Schraml R, Maisch T, Kobuch K, König B, Szeimies RM, Hillenkamp J, Bäumler W, Vasold R: Light-induced decomposition of indocyanine green; Invest Ophthalmol Vis Sci 49 (5), 1777 – 1783 (2008)
50. Kuo PC, Peyman GA, Men G, Bezerra Y, Torres F: The effect of indocyanine green pretreatment on the parameters of transscleral diode laser thermotherapy-induced threshold coagulation of the ciliary body; Lasers Surg Med 35, 157 – 162 (2004)
51. <http://de.wikipedia.org/wiki/Indocyanin%C3%BCCn>

52. Klein A, Bäumler W, Koller M, Shafirstein G, Kohl EA, Landthaler M, Babilas P: Indocyanine green-augmented diode laser therapy of telangiectatic leg veins: A randomized controlled proof-of-concept trial; *Lasers Surg Med* 44, 369 – 376 (2012)
53. Shafirstein G, Moreno M, Klein A, Siegel E, Babilas P, Landthaler M, Baeumler W: Treatment of leg veins with indocyanine green and lasers investigated with mathematical modelling; *Int J Hyperthermia* 27 (8), 771 – 781 (2011)
54. Omar GS, Wilsin M, Nair SP: Letal photosensitization of wound-associated microbes using indocyanine green and near-infrared light; *BMC Microbiology* 8, 111-121 (2008)
55. Kim BJ, Lee HG, Woo SM, Youn JI, Suh DH: Pilot study on photodynamic therapy for acne using indocyanine green and diode laser; *J Dermatol* 36(1), 17 – 21 (2009)
56. Szeimies RM, Lorenzen T, Karrer S, Abels C, Plettenberg A: Photochemotherapie kutaner Aids-assozierter Kaposi-Sarkome mit Indocyaningrün und Laserlicht: *Hautarzt* 52, 322 – 326 (2001)
57. Khosroshahi ME, Nourbakhsh MS, Saremi S, Tababace F: Characterization of skin tissue soldering using diode laser and indocyanine green: in vitro studies; *Lasers Med Sci* 25, 207 – 212 (2010)
58. Lim HJ, Oh CH: Indocyanine green-based photodynamic therapy with 785nm light emitting diode for oral squamous cancer cells; *Photodiagnosis Photodyn Ther* 8(4), 337 – 342 (2011)
59. Urbanska K, Romanowska-Dixon B, Matuszak Z, Oszajca J, Nowak-Sliwinska P, Stochel G: Indocyanine green as a prospective sensitizer for photodynamic therapy of melanomas; *Acta Biochim Pol* 49 (2), 387 – 393 (2002)
60. Perni S, Pratten J, Wilson M, Piccirillo C, Parkin IP, Prokopovich P: Antimicrobial Properties of Light-activated Polyurethane Containing Indocyanine Green;
61. Müller MJ: Ernährungsmedizinische Praxis: Methoden – Prävention – Behandlung. 2. Auflage, Springer, Kiel 2007, ISBN 978-3-540-38230-0, S. 76
62. Melikian V, Eddy JD, Paton A: The stimulant effect of drugs on indocyanine green clearance by the liver; *Gut* 13, 755-758 (1972)
63. Hope-Ross M, Yannuzzi LA, Gragoudas ES, Guyer DR, Slakter JS, Sorenson JA, Krupsky S, Orlock DA, Puliafito CA : Adverse reactions due to indocyanine green. *Ophthalmology* 101 (3), 529 – 533 (1994)
64. Boehm TK, Ciancio SG: Diode laser activated indocyanine green selectively kills bacteria; *Journal of the International Academy of Periodontology.* 13(2):58-63
65. Lang NP, Berglundh T, Heitz-Mayfield LJ, Pjetursson BE, Salvi GE, Sanz M: Consensus statements and recommended clinical procedures regarding implant survival and complications. *Int J Oral Maxillofac Implants* 19 Suppl, 150 – 154 (2004)
66. Frentzen M, Braun A, Koort HJ: Die 'Laserzahnbürste' - eine Perspektive? Devitalisierung von Plaque-Mikroorganismen durch laseraktivierbare Photosensitizer. *Laser J* 3, 16-21 (2000)
67. Gutknecht N (Hrsg): Proceedings of the 1st International Workshop of evidence based dentistry on lasers in dentistry; Quintessence Publishing Co. Ltd. New Malden 2007