

Rehabilitation der Funktion und Ästhetik bei Patienten mit parodontal geschädigten Zähnen

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Literatur

1. Anderegg C, Martin S, Gray J, Mellinig J, Gher M: Clinical evaluation of the use of decalcified freeze-dried bone allograft with guided tissue regeneration in the treatment of molar furcation invaginations. *J Periodontol* 62: 264-268, 1991.
2. Aukhil I, Petterson E, Suggs C: Guided tissue regeneration. An experimental procedure in beagle dogs. *J Periodontol* 57: 727-734, 1986.
3. Axelsson P, Lindhe J: The significance of maintenance care in the treatment of periodontal disease. *J Clin Periodont Res* 8: 281-294, 1981.
4. Bantleon H P, Droschl H: A precise and time saving method of setting up an indirectly bonded retainer. *Am J Orthodont* 93: 78-86, 1988.
5. Becker W, Becker B E, Berg L, Prichard J, Caffesse R, Rosenberg E: New attachment after treatment with root isolation procedures: Report for treated Class III and Class II furcations and vertical osseous defects. *Int J Periodontics Restorative Dent* 8: 2-16, 1988.
6. Becker W, Becker B, Prichard J, Caffesse R, Rosenberg E, Gian-Grasso J: Root isolation for new attachment procedures. A surgical and suturing method: Three case reports. *J Periodontol* 58: 819 – 826, 1987.

7. Bowers G M, Chadroff B, Carnevale R, Mellonig J, Cario R, Emerson J: Histologic evaluation of new attachment apparatus formation in humans. Parts I, II & III. *J Periodontol* 60: 664-693, 1989.
8. Boyd R L, Leggott P J, Quinn R S: Periodontal implications of orthodontic treatment in adults with reduced or normal periodontal tissues versus those of adolescents. *Am J Orthod Dentofacial Orthop* 96: 191-199, 1989.
9. Burstone C J: rational of the segmented arch. *Am J Orthod* 48: 805-822, 1962.
10. Burstone C J: Mechanics of the segmented arch technique. *Angle Orthod* 36: 99-120, 1966.
11. Burstone C J: Biomechanics of the orthodontic appliance, in Graber TM (ed): *Current Orthodontic concepts and Techniques*. Philadelphia, PA, Saunders PP 160-178, 1969.
12. Burstone C J: Deep overbite correction by intrusion. *Am j Orthod* 72: 1-22, 1977.
13. Burstone C J, Baldwin J J, Lawless D T: The application of continuous forces to orthodontics. *Angle Orthod* 31:1-14, 1961.
14. Burstone C J, Koenig H A: Forces systems from an ideal arch. *Am J Orthod* 65: 270-289, 1974.
15. Burstone C J, Koenig H A: Creative wire bending: The force system from step and V vends. *Am J Orthod Dentofac Orthop* 93: 59-67, 1988.
16. Burstone C J, Pryputniewicz R J: Holographic determination of center of rotation produced by orthodontic forces. *Am J Orthod* 77: 396-409, 1980.
17. Carey C W: Linear arch dimension and tooth size. *Am J Orthod* 35: 762-769, 1949.

18. Cortellini P, Clauser C, Pini Prato G P: Histologic assessment of new attachment following the treatment of a human buccal recession by means of a guided tissue regeneration procedure. *J Periodontol* 64: 387-391, 1993.
19. Cortelini P, Pini Patro G, Baldi C, Clauser C: Guided tissue regeneration with different materials. *Int J Periodontics Restorative Dent* 10: 137-151, 1990.
20. Dellinger E L: A histologic and cephalometric investigation of premolar intrusion in the Macaca speciosa monkey. *Am J Orthod* 53: 325-355, 1967.
21. Douglass C W, Gillings C, Sollecto W, Gammon M D: National trends in the prevalence and severity of the periodontal diseases. *J A D A* 107: 403-412, 1983.
22. Douglass C W, Gammon M D: The epidemiology of dental caries and its impact on the operative dentistry curriculum. *Journal of Dental Education* 48:547-555, 1984.
23. Ericsson J, Lindhe J: Effect of longstanding jiggling on experimental marginal periodontitis in the beagle dog. *J Clin Periodontol* 9: 497-503, 1982.
24. Ericsson I, Thilander B, Lindhe J. The effect of orthodontic tilting movement on the periodontal tissues of infected and noninfected dentitions in the dog. *J Clin Periodontol* 4: 115-127, 1977.
25. Ericsson I, Thilander B, Lindhe J: Periodontal condition after orthodontic tooth movement in the dog. *Angle Othod* 48: 210-218, 1978.
26. Fillion D: Zur approximalen Schmelzreduktion in der Erwachsenenkieferschmelzreduktion: Teil I, Anatomische und parodontale Gesichtspunkte. *Inf orthod Kieferorthop* 27: 48-63, 1995.

27. Fillion D: Zur approximalen Schmelzreduktion in der Erwachsenenkieferorthopädie: Teil II, Vor- und Nachteile der approximalen Schmelzreduktion. Inf Orthod Kieferthop 27: 64-90, 1995.
28. Fillion D: Zur approximalen Schmelzreduktion in der Erwachsenenkieferorthopädie: Teil III, Grundprinzipien der approximalen Schmelzreduktion und Vorgehensweise anhand dreier Fälle. Inf Orthod Kieferthop 27: 91-105, 1995.
29. Flores-de-Jacoby L, Zimmerman A, Tsalikis L: Experiences with guided tissue regeneration in the treatment of advanced periodontal disease. A clinical reentry study. Part I. Vertical, horizontal and combined vertical and horizontal periodontal defects. J Clin Periodontol 21: 113-117, 1994.
30. Geraci T F: Orthodontic movements of teeth into artificially produced infrabony defects in the rhesus monkey: a histological report. J Periodontol 44: 116-122, 1973.
31. Geraci T F, Nevins M, Crosetti H W, Drizen K, Ruben M P: Reattachment of the periodontium after tooth movement into an osseous defect in a monkey. Part I. Int J Periodontics Restorative Dent 10: 185-207, 1990.
32. Gottlow J, Nyman S, Karring T: Maintenance of new attachment gained through guided tissue regeneration. J Clin Periodontol 19: 315-317, 1992.
33. Gottlow, J, Nyman, S, Karring T, Lindhe, J: New attachment formation as the result of controlled tissue regeneration. J Clin Periodontol 11: 494-503, 1984.
34. Gottlow J, Nyman S, Lindhe J, Karring T, Wennstrom J: New attachment formation in the human periodontium by guided tissue regeneration: Case reports. J Clin Periodontol 13: 604-616, 1986.
35. Harris E F, Baker W C: Loss of root length and crestal bone height before and during treatment in adolescent and adult orthodontic patients. AM J Orthod Dentofacial Orthop 98: 463-469, 1990.

36. Hug H U: Periodontal status and its relationship to variations in tooth position. An analysis of the findings reported in the literature, *Helv Odont Acta* 26: 11-24, 1982.
37. Jonson N W, Griffiths G S, Wilton J M A: Detection of high-risk groups and individuals for periodontal diseases. Evidence for the existence of high-risk groups and individuals and approaches to their detection. *J Clin Periodontol* 15: 276-282, 1988.
38. Karring T, Nyman S, Lindhe J: Healing following implantation of periodontitis affected roots into bone tissue. *J Clin Periodontol* 7: 96–105, 1980.
39. Lekovic V, Kenney E B, Carranza F A, Danilovic V: Treatment of Class II furcation defects using porous hydroxylapatite in conjunction with a polytetrafluoroethylene membrane. *J Periodontol* 61: 575–578, 1990.
40. Lindauer S J, Britto A D: Biological response to biomechanical signals: Orthodontic mechanics to control tooth movement. *Semin Orthod* 6: 145-154, 2000.
41. Lindhe J: *Textbook of Clinical Periodontology*, 2nd ed, Munksgaard, Copenhagen 1989.
42. Lindhe J, Ericsson I: The influence of trauma from occlusion on reduced but healthy periodontal tissues in dogs. *J Clin Periodontol* 3: 110-122, 1976.
43. Lindhe J, Nyman S: The effect of plaque control and surgical pocket elimination on the establishment and maintenance of periodontal health. A longitudinal study of periodontal therapy in cases of advanced disease. *J Clin Periodont* 2: 67-79, 1975.
44. Linskog-Stokland B, Ennstrom J L, Nyman S, Thilander B: Orthodontic tooth movement into edentulous areas with reduced bone height. An experimental study in the dog. *Eur J Orthod* 15: 89-96, 1993.

45. Marks M H, Corn H: *Atlas of orthodontics*, Philadelphia, Lea & Febiger PP 134-135, 1989.
46. McClain P, Schallhorn R G: Long-term assessment of combined osseous composite grafting, root conditioning, and guided tissue regeneration. *Int J Periodontics Restorative Dent* 13: 6-27, 1993.
47. Melcher A H: On the repair potential of periodontal tissues. *J Periodontol* 47: 256-260, 1976.
48. Melsen B: Behandlungsprobleme bei erwachsenen Patienten. *Fortschr Kieferorthop* 44: 12-21, 1983.
49. Melsen B: Tissue reaction following application of extrusive and intrusive forces to teeth in adult monkeys. *Am J Orthod Dentofac Orthop* 89: 469-475, 1986.
50. Melsen B: Adult orthodontics: Factors differentiating the selection of biomechanics in growing and adult individuals. *Int Adult Orthod Orthognath Surg* 3: 167-177, 1988.
51. Melsen B, Agerbaek N, Markenstam G: Intrusion of incisors in adult patients with marginal bone loss. *Am J Orthod Dentofacial Orthop* 96: 232-241, 1989.
52. Melsen B, Agerbaek N, Eriksen J: New attachment through periodontal treatment and orthodontic intrusion. *Am J Orthod Dentofacial Orthop* 94: 104-116, 1988.
53. Melsen B, Kragskov J: Tissue reaction to intrusion of periodontally involved teeth. In: Davidovitch Z, editor. *The Biological Mechanisms of tooth Movement and Craniofacial Adaption*. The Ohio State University, College of Dentistry, Columbus, OH: 423-430, 1992.

54. Nemcovsky C E, Zubery Y, Arzi Z, Liebermann M: Orthodontic tooth movement following guided tissue regeneration: Report of three cases. *Int J Adult Orthognath Surg* 11: 347-355, 1996.
55. Nemcovsky C E, Watted N, Liebermann M: Orthodontische Zahnbewegung nach vorausgegangener gesteuerter Geweberegeneration (Guided Tissue Regeneration = GTR). *Inf Orthodo Kieferorthop* 31: 335-344, 1999.
56. Nyman S, Gottlow J, Karring T, Lindhe J: The regenerativ potential of the periodontal ligament. An Experimental study in the monkey. *J Clin Periodontol* 9:257-265, 1982.
57. Nyman S, Karring T, Lindhe J, Planten S: Healing following implantation of periodontitis affected roots into gingival connective tissue. *J Clin Periodontol* 7: 394–401, 1980.
58. Paskow H: Selv-alignment following interproximal stripping. *Am J Ortod* 58: 240-249, 1970.
59. Pihlstrom B L, Anderson K A, Aeppli D: Association between sings of trauma from occlusion and periodontitis. *J Periodontol* 57: 1-6, 1986.
60. Polson A M, Caton J, Polson A P, Nyman S, Novak J, Reed B: Periodontal response after tooth movement into intrabony defects. *J Periodontol* 55: 197-202, 1984.
61. Polson A M, Meitner S W, Zander H A: Trauma and progression of marginal periodontitis in squirrel monkeys (III). Adaptation of interproximal alveolar bone to repetitive injury. *Periodontol Res* 11: 279-289, 1976.
62. Pontoriero R, Lindhe J, Nyman S, Karring T, Rosenberg E, Sanavi F.: Guided tissue regeneration in degree II furcation involved mandibular molars. *J Clin Periodontol* 15: 247-254, 1988.

63. Pontoriero R, Lindhe J, Nyman S, Karring T, Rosenberg E, Sanavi F: Guided tissue regenerationn in the treatment of furcation defects in mandibular molars. A clinical study of degree III involvements. *J Clin Periodontol* 16:170-174, 1989.
64. Proffit W R: Equilibrium theory revisited: Factors influencing position of the teeth. *Angle Orthod* 48: 175-186, 1978.
65. Quinn R S, Yoshikawa D K: A reassessment of force magnitude in orthodontics. *Am J Orthod* 88: 252-260, 1985.
66. Ramfjord S P: Changing concepts in periodontics. *J Prosthet Dent* 52: 781-786, 1984.
67. Schallhorn R G, McClain P: Combined osseous composite grafting, root conditioning and guided tissue regeneration. *Int J Periodontics Restorative Dent* 8: 9-32, 1988.
68. Schei O, Waerhaug J, Lodvdal A, Arnulf A: Alveolar bone loss as related to oral hygiene and age. *J Periodont* 26: 7-16, 1959.
69. Schönherr E: Das Rezidiv und seine Verhütung bei der kieferorthopädischen Behandlung Erwachsener. *Fortschr Kieferorthop* 23: 366-376, 1962.
70. Sheridan J J: Air-rotor stripping. *J Clin Orthod* 19: 43-59, 1985.
71. Smith R J, Burstone C J: Mechanics of tooth movement. *Am J Orthod* 85: 294-307, 1984.
72. Stahl S S, Froum S J: Healing of human suprabony lesions treated with guided tissue regeneration and coronally anchored flaps. *J Clin Periodontol* 18: 69-74, 1991.

73. Stahl S S, Froum S J: Histologic healing responses in human vertical lesions following the use of osseous allografts and barrier membranes. *J Clin Periodontol* 1: 149-152, 1991.
74. Stahl S S, Froum S J, Tarnow D: Human histologic responses to guided tissue regenerative techniques in intrabony lesions. Case report on 9 sites. *J Clin Periodontol* 17: 191-198, 1990.
75. Stenvik A, Mjör I: Pulp and denture reactions to experimental tooth intrusion. *Am J Orthod* 57: 370-385, 1976.
76. Strahm C, Joho J P, Chausse J M: Teamwork en Médecine Dentaire. *Schweiz. Monatsschr Zahnmed* 90:1099-1112, 1980.
77. Ten Cate A R, Mills C: The development of the periodontium: The origin of alveolar bone. *Anat Rec* 173: 69–78, 1972.
78. Thilander B: Indications for orthodontic treatment in adults. *Europ J Orthodont* 1:227-235, 1979.
79. Vanarsdall R L: La Reaction des Tissus Parodontaux Aux Movements Orthodontiqui, *L'Orthodont Francaise, Orthodontic De L'adulte, S.I.D., Vanves* 57: 421-433, 1986.
80. Watted N, Nemcovsky C, Bill J: Orthodontie nach parodontalregenerativen Maßnahmen. *Kieferorthop* 13: 267-278, 1999.
81. Wennstrom J L, Lindskog-Stokland B, Nyman S, Thilander B: Periodontal tissue response to orthodontic movement of teeth with infrabony pockets. *Am J Orthod Dentofacial Orthop* 103: 313-319, 1993.
82. Wenzel A, Warren K, Karring T: Digital subtraction radiography in assessing bone changes in periodontal defects following guided tissue regeneration. *J Clin Periodontol* 19: 208-213, 1992.

83. Zachrisson B U: The bonded lingual retainer and multiple scaping of anterior teeth. J Clin Orthod 17: 838-844, 1983.
84. Zachrisson BU: Adult retention: A new approach. In: Graber TM, ed. Orthodontics: State of the Art –Essence of the Science. St Louis, Mosby,: 310-327, 1986.
85. Zachrisson B U: Clinical experiences with direct-bonded orthodontic retainer. Amer J Orthodont 71: 440-451, 1977.
86. Zappa, U.: Resorbierbare Membranen (I und II). Klinische und histologische Aspekte. Schweiz Monatsschr Zahnmed 101: 1146-1153 und 1320-1326, 1991.