

7. Literaturverzeichnis

1. *Abou-Rass, M., Patonai, F.:* The effect of decreasing surface tension on the flow of irrigating solutions in narrow root canals. *Oral Surg Oral Med Oral Pathol* 53, 524-526 (1982).
2. *Adenubi, J. O., Rule, D. C.:* Success rate for root fillings in young patients. *Br Dent J* 141, 237-241 (1976).
3. *Al-Khatar, N., Kunzelmann, K.-H., Hickel, R.:* Dichtigkeit und Wandständigkeit verschiedener endodontischer Sealer in schmierschichtfreien Wurzelkanälen. *Dtsch Zahnärztl Z* 54, 479-483 (1999).
4. *Allen, R. K., Newton, C. W., Brown, C. E.:* A Statistical analysis of surgical und nonsurgical endodontic retreatment cases. *J Endod* 15, 261-266 (1989).
5. *Allison, D. A., Webber, C. R., Walton, R. E.:* The influence of the method of canal preparation on the quality of apical and coronal obturation. *J Endod* 5, 298-304 (1979).
6. *Amonn, D. J., Snell, G. M., Broome, J. C.:* Apical extrusion of gutta-percha with four obturation techniques. *J Dent Res* 70, 564, Abstr. #2382 (1991).
7. *Ayhan, H., Sultan, N., Cirak, M., Ruhi, M., Bodur, H.:* Antimicrobial effects of various endodontic irrigants on selected microorganisms. *Int Endod J* 32, 99-102 (1999).
8. *Barkhordar, R. A., Pelzner, R. B., Stark, M. M.:* Use of glass ionomers as retrofilling materials. *Oral Surg Oral Med Oral Pathol* 67, 734-739 (1989).
9. *Barnes, G., Langeland, K.:* Antibody formation in primates following introduction of antigens into the root canal. *J Dent Res* 45, 1111-1114 (1966).
10. *Barnes, I. E.:* Principles of Apicectomy Technique. Wright, London 1991. S. 9.
11. *Barthel, C. R., Lösche, G. M., Zimmer, S., Roulet, J.-F.:* A quantitative method to determine dye penetration of root canal fillings. *J Dent Res* 71, 211, Abstr. #848 (1992).
12. *Barthel, C. R., Moshonov, J., Shuping, G., Orstavik, D.:* Bacterial leakage versus dye leakage in obturated root canals. *Int Endod J* 32, 370-375 (1999).
13. *Barthel, C. R., Strobach, A., Briedigkeit, H., Gobel, U. B., Roulet, J. F.:* Leakage in roots coronally sealed with different temporary fillings. *J Endod* 25, 731-734 (1999).
14. *Bauer, J. G., Henson, J. L.:* Microleakage: A measure of the performance of direct filling materials. *Oper Dent* 9, 2-9 (1984).
15. *Baumann, M.:* Die räumliche Darstellung des Endodonts. Hanser, München 1995. S. 9.
16. *Baumann, M., Beer, R.:* Endodontologie. Thieme, Stuttgart 1997.

17. *Baumann, M., Beer, R.*: Revision endodontischer Mißerfolge. In: *Rateitschak, K.* (Hrsg.): Endodontologie. Thieme, Stuttgart 1997. S. 209.
18. *Baumgartner, J., Cuenin, P.*: Efficacy of several concentrations of sodium hypochlorite for root canal irrigation. *J Endod* 18, 605-612 (1992).
19. *Beatty, R. G., Baker, P. S., Haddix, J., Hart, F.*: The efficacy of four root canal obturation techniques in preventing apikal dye penetration. *J Am Dent Assoc* 119, 633-637 (1989).
20. *Beatty, R. G., Vertucci, F. J., Zakariasen, K. L.*: Apikal sealing efficacy of endodontic obturation techniques. *Int Endod J* 19, 237-241 (1986).
21. *Beatty, R. G., Zakariasen, K. L.*: Apikal leakage associated with three obturation techniques in large and small canals. *Int Endod J* 17, 67-72 (1984).
22. *Beatty, R. G., Zakariasen, K. L.*: Apikal sealing efficacy of endodontic instrumentation and obturation techniques. *J Dent Res* 64, 183, Abstr. #76 (1985).
23. *Becker, G., Cohen, S., Borer, R.*: The sequelae of accidentally injecting sodium hypochlorite beyond the root apex. *Oral Surg Oral Med Oral Pathol* 38, 633-638 (1974).
24. *Becker, S. A., Fraunhofer, J. A.*: The comparative leakage behavior of reverse filling materials. *J Endod* 15, 246-248 (1989).
25. *Bender, I., Seltzer, S., Tashman, S., Meloff, G.*: Dental procedures in patients with rheumatic heart disease. *Oral Surg Oral Med Oral Pathol* 16, 466-473 (1963).
26. *Bergenholtz, G., Lekholm, U., Milthon, R., Heden, G., Ödesjö, B., Engström, B.*: Retreatment of endodontic fillings. *J Dent Res* 87, 217-224 (1979).
27. *Bergenholtz, G., Lekholm, V., Milthon, R., Engström, B.*: Influence of apical overinstrumentation and overfilling on retreated root canals. *J Endod* 5, 310-314 (1979).
28. *Bhaskar, S. N.*: Periapical lesion: types, incidence, and clinical features. *Oral Surg Oral Med Oral Pathol* 21, 657-671 (1966).
29. *Block, R. M., Bushell, A.*: Retrograde amalgam procedures for mandibular posterior teeth. *J Endod* 8, 107-112 (1982).
30. *Block, S.*: Desinfection, sterilization and preservation. Lea & Febiger, Philadelphia 1977. S. 167-195.
31. *Bondra, D. L., Hartwell, G. R., MacPherson, M. G., Postell, F. R.*: Leakage in vitro with IRM, high copper amalgam and EBA cement as retrofilling materials. *J Endod* 15, 157-160 (1989).

32. *Bratel, J., Jontell, M., Dahlgren, U., Bergenholtz, G.:* Effects of root canal sealers on immunocompetent cells in vitro and in vivo. *Int Endod J* 31, 178-188 (1998).
33. *Brayton, S. M., Davis, S. R., Goldman, M.:* Gutta-percha root canal fillings. An in vitro analysis. I. *Oral Surg Oral Med Oral Pathol* 35, 226-231 (1973).
34. *Briseno, B. M., Willershausen, B.:* Root canal sealer cytotoxicity on human gingival fibroblasts. II. Silicone- and resin-based sealers. *J Endod* 17, 537-540 (1991).
35. *Brothman, P.:* Getting back to basics: an endodontist's views on endodontic practice and education. *J Dist Columbia Dent Soc* 54, 7-9 (1979).
36. *Buchalla, W., Attin, T., Brücklmeier, R., Hellwig, E.:* Computergestützte Methode zur quantitativen Bestimmung der apikalen Undichtigkeit von Wurzelkanalfüllungen. *Dtsch Zahnärztl Z* 54, 244-248 (1999).
37. *Budd, C. S., Weller, R. N., Kulild, J. C.:* A comparison of thermoplasticized injectable gutta-percha obturation techniques. *J Endod* 17, 260-264. (1991).
38. *Bumberger-Nießlbeck, U., Kunde, V., Hoffmeister, B.:* Statistische Erhebungen zu 9446 Wurzelspitzenresektionen. *Dtsch Zahnärztl Z* 42, 224-225 (1987).
39. *Byström, A., Sundqvist, G.:* Bacteriologic evaluation of the effect of 0,5 percent sodium hypochlorite in endodontic therapy. *Oral Surg Oral Med Oral Pathol* 55, 307-312 (1983).
40. *Byström, A., Sundqvist, G.:* Bacteriologic evaluation of the efficacy of mechanical root canal instrumentation in endodontic therapy. *Scand J Dent Res* 89, 321-328 (1981).
41. *Cailleteau, J., Mullaney, T.:* Prevalence of teaching apical patency and various instrumentation and obturation techniques in United States dental schools. *J Endod* 23, 394-396 (1997).
42. *Carns, E. J., Skidmore, A. E.:* Configurations and deviations of root canals of maxillary first premolars. *Oral Surg Oral Med Oral Pathol* 36, 880-886 (1973).
43. *Chong, B. S., Pitt Ford, T. R., Watson, T. F.:* The adaptation and sealing ability of light-cured glass ionomer retrograde root fillings. *Int Endod J* 24, 223-232 (1991).
44. *Chow, T.:* Mechanical effectiveness of root canal irrigants. *J Endod* 9, 475-479 (1977).
45. *Coffae, K. P., Brilliant, J. D.:* The effect of serial preparation versus nonserial preparation on tissue removal in the root canals of extracted mandibular human molars. *J Endod* 1, 211-214 (1975).
46. *Cohen, S., Burns, R. C.:* *Pathways of the Pulp.* Mosby, St. Louis 1994. S. 183.
47. *Coviello, J., Brilliant, J. D., Wright, J.:* Preliminary scanning electron microscopic study of the chlorosin lateral condensation technique. *J Endod* 3, 54-62 (1977).

48. *Dahl, B. L., Tronstad, L.:* Biological tests of an experimental glass ionomer (silicopolyacrylate) cement. *Oral Rehabil* 3, 19-24 (1976).
49. *De Groot, M., Vertucci, F., Nixon, C., Pink, F.:* Apical dye penetration associated with five root canal obturation techniques. *J Dent Res* 69, 176, Abstr. #539 (1990).
50. *Debelian, G., Olsen, I., Tronstad, L.:* Bacteremia in conjunction with endodontic therapy. *Endod Dent Traumatol* 11, 142-149 (1995).
51. *Delany, G., Patterson, S., Miller, C., Newton, C.:* The effect of chlorhexidine glukonate irrigation on the root canal flora of freshly extracted teeth. *Oral Surg Oral Med Oral Pathol* 53, 518-523 (1982).
52. *DGZ und DGZMK:* Wurzelfüllpasten und Füllstifte. Gemeinsame Stellungnahme der DGZMK und DGZ. *Dtsch Zahnärztl Z* 55, 9-11 (2000).
53. *Dickson, S. S., Peters, D. D.:* Leakage evaluation with and without vacuum of halothane-dip vs laterally condensed gutta-percha fill techniques. *J Endod* 19, 204, Abstr. #4 (1993).
54. *Dickson, S. S., Peters, D. D.:* Leakage evaluation with and without vacuum of two gutta-percha fill techniques. *J Endod* 19, 398-403 (1993).
55. *Diedrich, P., Heidemann, D., Horch, H.-H., Koeck, B.:* *Wurzelspitzenresektion*. Urban und Schwarzenberg, München 1995. S. 189.
56. *Dorn, S. O., Gartner, A. H.:* Retrograde filling materials: a retrospective success-failure study of amalgam, EBA and IRM. *J Endod* 16, 391-393 (1990).
57. *Douglas, W. H., Zakariasen, K. L.:* Volumetric assessment of apikal leakage utilizing a spectrophotometric, dye-recovery method. *J Dent Res* 60, 434, Abstr #512 (1981).
58. *Dow, P. R., Ingle, J. I.:* Isotope determination of root canal failure. *Oral Surg Oral Med Oral Pathol* 8, 1100-1104 (1955).
59. *Europäische Gesellschaft für Endodontologie:* Qualitätsrichtlinien endodontischer Behandlung. Konsenspapier der Europäischen Gesellschaft für Endodontologie. *Endodontie* 4, 263-276 (1994).
60. *Engström, B., Hard, A. F., Segerstad, L., Ramstrom, G., Frostell, G.:* Correlation of positive cultures with the prognosis for canal treatment. *Odontol Rev* 15, 257-270 (1964).
61. *Fabra-Campos, H.:* Experimental apical sealing with a new canal obturation system. *J Endod* 19, 71-75 (1993).
62. *Feldman, G., Nyborg, H.:* Tissue reactions to root filling materials. *Odontol Rev* 13, 1-14 (1962).

63. *Fischer, G.*: Über die feinere Anatomie der Wurzelkanäle menschlicher Zähne. Dtsch Monatsschr Zahnheilk 25, 544-552 (1907).
64. *Frank, A. L., Glick, D. H., Patterson, S. S., Weine, F. S.*: Long term evaluation of surgically placed amalgam fillings. J Endod 18, 391-398 (1992).
65. *Friedman, S., Löst, C., Zarrabian, M., Trope, M.*: Evaluation of success and failure after endodontic therapy using a glass ionomer cement sealer. J Endod 21, 384-390 (1995).
66. *Friend, L. A., Browne, R. M.*: Tissue reactions to some root filling materials. Br Dent J 125, 291-294 (1968).
67. *Gabka, J., Harnisch, H.*: Wurzelspitzenresektion. Thieme, Stuttgart 1982. S. 331.
68. *Garvin, M. Y.*: Root resection. J Can Dent Assoc 8, 126-137 (1942).
69. *Gasparini, C.*: Dichtigkeitsprüfungen thermoplastischer Wurzelfüllungen in geraden und gekrümmten Kanälen bei Zähnen mit weitem apikalen Foramen in vitro. Zahnmed Diss, Berlin 1994.
70. *Gettleman, B. H., Messer, H., ElDeeb, M.*: Adhesion of sealer cements to dentin with and without the smear layer. J Endod 17, 15-20 (1991).
71. *Geurtsen, W.*: Die Wurzelkanalaufbereitung. Methoden im Überblick: Mechanische, chemische und schall-/ultraschallaktivierte Verfahren. Phillip 7, 23-30 (1990).
72. *Geurtsen, W., Leyhausen, G.*: Biological aspects of root canal filling materials - histocompatibility, cytotoxicity, and mutagenicity. Clin Oral Invest 1, 5-11 (1997).
73. *Goldman, M., Simmonds, S., Rush, R.*: The usefulness of dye-penetration studies reexamined. Oral Surg Oral Med Oral Pathol 67, 327-332 (1989).
74. *Goracci, G., Cantatore, G., Filanti, G.*: Canal obturation. Analysis of 4 different techniques. Dent Cadmos 59, 11-20 (1991).
75. *Green, D., Brooklyn, N. Y.*: Double canals in single roots. Oral Surg Oral Med Oral Pathol 35, 689 (1973).
76. *Grossman, L.*: Endodontic practice. Lea & Febiger, Philadelphia, Pennsylvania 1968. S. 416.
77. *Grossman, L. I.*: Endodontic failures. Dent Clin North Am 16, 59-70 (1972).
78. *Grung, B.*: Nachuntersuchungen bei apektomierten Zähnen. Dtsch Zahnärztl Z 27, 767 (1972).
79. *Guldener, P.*: Wurzelspitzenresektion. Retrograde Kavitätenpräparation und retrograde Wurzelfüllmaterialien. Schweiz Monatsschr Zahnmed 104, 183-189 (1994).

80. *Guldener, P. H. A.*: Aufbereitung und Reinigung des Wurzelkanals. Thieme, Stuttgart 1987. S. 200-244.
81. *Haas, R., Mensdorff-Pouilly, N., Riegler-Thornton, B., Watzek, G., Mailath-Pokorny, G.*: Vorteile der mikrochirurgischen Apexresektion und Retropräparation mittels Ultraschall gegenüber der herkömmlichen Wurzelspitzenresektion. Fortschr Kiefer Gesichtschir 40, 156-159 (1995).
82. *Haddix, J. E., Jarell, K., Mattison, G. D., Pink, F. E.*: An in vitro investigation of the apical seal produced by a new thermoplasticized gutta-percha obturation technique. Quintessence Int 22, 159-163 (1991).
83. *Harndt, E.*: Histo-bakteriologische Untersuchungen der erkrankten Pulpa. Dtsch Zahn Mund Kieferheilk 5, 85-101 (1938).
84. *Harndt, R.*: Pulpitis an nicht kariösen Zähnen. Dtsch Zahnärztekalendar 26, 87-95 (1967).
85. *Harnisch, H., Grieger, C.*: Fehlerquellen bei der Wurzelspitzenresektion. Zahnärztl Welt 68, 125-127 (1967).
86. *Harty, F. J., Parkins, B. J., Wengraf, A. M.*: The success rate of apicoectomy. Br Dent J 129, 407-413 (1970).
87. *Harvey, T., White, J., Leeb, I.*: Lateral condensation stress in root canals. J Endod 7, 151-155 (1981).
88. *Hellwig, E., Klimek, J., Attin, T.*: Einführung in die Zahnerhaltung. Urban & Schwarzenberg, München 1995. S. 272.
89. *Hess, W.*: Zur Anatomie der Wurzelkanäle des menschlichen Gebisses mit Berücksichtigung der feineren Verzweigungen am Foramen apikale. Schweiz Vierteljahrsschr Zahnheilk 27, 1-34 (1917).
90. *Hoefig, W.*: Ewald Harndt: Aspekte des Wissenschaftlichen Werkes. Quintessenz, Berlin 1981.
91. *Holland, G., DeSouza, V., Nery, M., DeMello, W., Bernabe, P., Otoboni-Filho, J.*: Tissue reactions following apical plugging of the root canal with infected dentin chips. Oral Surg Oral Med Oral Pathol 49, 366-369 (1980).
92. *Horiba, N., Maekawa, Y., Matsumoto, T., Nakamura, H.*: A study of the distribution of endotoxin in the dental wall of infected root canals. J Endod 16, 331-334 (1990).
93. *Hülsmann, M.*: Entwicklung einer Methodik zur standardisierten Überprüfung verschiedener Aufbereitungsparameter und vergleichende In-vitro-Untersuchung

- unterschiedlicher Systeme zur maschinellen Wurzelkanalaufbereitung. Habil.-Schr. Quintessenz, Göttingen 2000. S. 1.
94. *Hülsmann, M.*: Misserfolge. In: *Hülsmann, M.* (Hrsg.): Endodontie. Thieme, Stuttgart 1993. S. 67.
95. *Hülsmann, M.*: Retreatment decision making by a group of general dental Practitioners in Germany. *Int Endod J* 27, 125-132 (1994).
96. *Hülsmann, M., Snezna, S.*: Veränderungen in bezug auf Häufigkeit und Qualität der endodontischen Versorgung 1976-1993. *Dtsch Zahnärztl Z* 53, 392-397 (1998).
97. *Hürlimann, J.*: Wurzelspitzenresektionen, ihre klinischen und röntgenologischen Resultate am zahnärztlichen Institut der Universität Zürich aus den Jahren 1935/44. Thesis Buchdruckerei Fluntern, Zürich 1946.
98. *Ingle, J. I.*: A standardized endodontic technique using newly designed instruments and filling materials. *Oral Surg Oral Med Oral Pathol* 14, 83-91 (1961).
99. *Ingle, J. I., Taintor, J. F.*: Endodontics. Lea and Febiger, Philadelphia 1985. S. 27.
100. *Inoue, S., Yoshimura, M., Tinkle, J., Marshall, F. J.*: A 24 week study of microleakage of four retrofilling materials using a fluid filtration method. *J Endod* 17, 369-375 (1991).
101. *Jeansonne, M., White, R.*: A comparison of 2.0% chlorhexidine gluconate and 5.25% sodium hypochlorite as antimicrobial endodontic irrigants. *J Endod* 20, 276-278 (1994).
102. *Jokinen, M. A., Kotilainen, R., Poikkeus, P., Poikkeus, R., Sarkki, L.*: Clinical and radiographic study of pulpectomy and root canal therapy. *Scand J Dent Res* 86, 366-373 (1978).
103. *Karagös-Küçükay, I., Karagös-Küçükay, S., Bayirli, G.*: Factors affecting apical leakage assessment. *J Endod* 19, 362-365 (1993).
104. *Kartal, N., Özcelik, B., Cimilli, H.*: Root canal morphology of maxillary premolars. *J Endod* 24, 417-419 (1998).
105. *Kawahara, H., Imamishi, Y., Oshima, H.*: Biological evaluation of glass ionomer cement. *J Dent Res* 50, 1080-1086 (1979).
106. *Kerekes, K., Tronstad, L.*: Long-term results of endodontic treatment performed with a standardized technique. *J Endod* 5, 83-90 (1979).
107. *Kersten, H. W., Moorer, W. R.*: Particles and molecules in endodontic leakage. *Int Endod J* 22, 118-124 (1989).
108. *Ketterl, W.*: Revision einer Wurzelfüllung. Hüthig, Heidelberg 1984. S. 138.

109. *Khoury, F., Schulte, A., Becker, R., Hahn, T.:* Prospektive Vergleichsstudie zwischen prä- und intraoperativer Wurzelfüllung. Dtsch Zahnärztl Z 42, 248-250 (1987).
110. *Khoury, F., Staehle, H. J.:* Retrograde Wurzelfüllungen aus Glasionomerzement. Dtsch Zahn Mund Kiefer GesichtsChir 11, 351-355 (1987).
111. *King, K. T., Anderson, R. W., Pashley, D. H., Pantera, E. A.:* Longitudinal evaluation of the seal of endodontic retrofills. J Endod 16, 307-310 (1990).
112. *Klaiber, B., Mittermayer, C., Kaden, P., Schwechten, I.:* Toxizitätsbestimmung von Wurzelfüllmaterialien und deren einzelnen Komponenten in der Zellkultur. Dtsch Zahnärztl Z 36, 212-216 (1981).
113. *Kockapan, C.:* Die Bedeutung der Schmierschicht bei der Wurzelkanalbehandlung - eine Übersicht. Endodontie 4, 33-48 (1995).
114. *Kockapan, C.:* Elektronenmikroskopische Untersuchungen über die Struktur der Schmierschicht. Dtsch Zahnärztl Z 42, 1028-1034 (1987).
115. *Kopp, S., Hoffmeister, B., Bumberger, U.:* Komplikationen und Mißerfolge der Wurzelspitzenresektion - eine Auswertung von 3281 Fällen. Dtsch Zahnärztl Z 42, 228-230 (1987).
116. *Kos, W. L., Anlozzi, D. P., Gerstein, H.:* A comparative bacterial microleakage of refilling materials. J Endod 8, 355-358 (1982).
117. *Koulaouzidou, E. A., Papazisi, K. T., Beltes, P., Geromichalos, G. D., Kortsaris, A. H.:* Cytotoxicity of three resin-based root canal sealers: an in vitro evaluation. Endod Dent Traumatol 14-18, 182 (1998).
118. *Kröncke, A.:* Der Wurzelkanal nach der mechanischen Aufbereitung. Dtsch Zahnärztl Z 30, 321-322 (1975).
119. *Kuruvilla, J., Kamath, M.:* Antimicrobial activity of 2.5% sodium hypochlorite and 0.2% chlorhexidine gluconate separately and combined, as endodontic irrigant. J Endod 24, 472-476 (1998).
120. *Kvist, T., Reit, C.:* Results of endodontic retreatment: A randomized clinical study comparing surgical and nonsurgical procedures. J Endod 25, 814-817 (1999).
121. *Kvist, T., Rydin, E., Reit, C.:* The relative frequency of periapical lesion in teeth with root canal-retained posts. J Endod 15, 578-580 (1989).
122. *La Combe, J. S., Campbell, A. D., Hichs, M. L., Pellen, B.:* A comparison of the apical seal produced by two thermoplasticized injectable gutta-percha techniques. J Endod 14, 445-450 (1988).

123. *Larder, T. C., Prescott, A. J., Brayton, S. M.:* Gutta-percha: A comparative study of the methods of obturation. *J Endod* 2, 289-294 (1976).
124. *Lehmann, J., Bell, W., Gerstein, H.:* Sodium lauryl sulfate as an endodontic irrigant. *J Endod* 7, 381-384 (1981).
125. *Leonardo, M. R., da Silva, L. A. B., Almeida, W. A., Utrilla, L. S.:* Tissue response to an epoxy resin-based root canal sealer. *Endod Dent Traumatol* 15, 28-30 (1999).
126. *Limkangwalmongkol, S., Abott, P. V., Sander, A. B.:* Apical dye penetration with four root canal sealers and gutta-percha using longitudinal sectioning. *J Endod* 18, 535-539 (1992).
127. *Lindemann, U., Kopp, St., Hoffmeister, B.:* Die Ergebnisse der präoperativen und intraoperativen Wurzelfüllung bei der Wurzelspitzenresektion im Vergleich. *Dtsch Zahnärztl Z* 42, 228-230 (1987).
128. *Lipschitz, M.:* Diagnostik und Therapie der Pulpkrankheiten. 1920. S. 252-262.
129. *Lorton, L., Peters, D. D., Wong, M.:* Reproduction of canal detail by gutta percha points using six different filling techniques. *J Dent Res* 60, Abstr. #170 (1981).
130. *Lutz, M., Klimek, J., Hellwig, E.:* Vergleich thermomechanischer und konventioneller Wurzelfülltechniken. *Dtsch Zahnärztl Z* 41, 788-791 (1986).
131. *Mandel, E., Friedman, S.:* Endodontic retreatment: A rational approach to root canal reinstrumentation. *J Endod* 18, 565-569 (1992).
132. *Mann, S. R., Mc Walter, G. M.:* Evaluation of apical seal and placement control in straight and curved canals obturated by laterally condensed and thermoplasticized gutta-percha. *J Endod* 13, 10-17 (1987).
133. *Masters, J. W., Higa, R., Torabinejad, M.:* The effects on vacuuming on dye leakage patterns. *J Endod* 19, 190, Abstr. #19 (1993).
134. *Matloff, J. R., Jensen, J. R., Singer, L., Tabibi, A.:* A comparison of methods used in root canal sealability studies. *Oral Surg Oral Med Oral Pathol* 53, 203-208 (1982).
135. *Matsumoto, K., Inoue, K., Matsumoto, A.:* The effect of newly developed root canal sealers on rat dental pulp cells in primary culture. *J Endod* 15, 60-67 (1989).
136. *Mayr, W. D.:* Kontrollen und Erfahrungen bei Wurzelspitzenresektionen unter Verwendung von Silberstiften. *Öst Z Stomat* 64, 194-198 (1967).
137. *McGinnity, T. L., Mueninghoff, L. A., Brandt, R. E.:* Obturation efficacy after post-space preparation: Effect of obturation diameter. *J Dent Res* 69, 176, Abstr. #542 (1990).

138. *Meister, F., Lommel, T. J., Gerstein, H.:* Diagnosis and possible causes of vertical root fractures. *Oral Surg Oral Med Oral Pathol* 49, 244-253 (1980).
139. *Meryon, S. D., Stephens, P.G., Browne, A.:* A comparison of the in vitro cytotoxicity of two glass ionomer cements. *J Dent Res* 62, 769-773 (1983).
140. *Miller, W. D.:* Lehrbuch der konservierenden Zahnheilkunde. Thieme, Leipzig 1903. S. 339.
141. *Moorer, W., Wesselink, P.:* Factors promoting the tissue dissolving capability of sodium hypochlorite. *Int Endod J* 15, 187-196 (1982).
142. *Mullaney, T.:* Instrumentation of finely curved canals. *Dent Clin North Am* 23, 575-592 (1979).
143. *Müller, W.:* Die Wurzelspitzenresektion. In: *Schwenzer, N., Grimm, G.* (Hrsg.): *Zahn-Mund-Kiefer-Heilkunde Bd.2.* Thieme, Stuttgart 1981. S. 49.
144. *Myers, D., Pashley, D., Whitford, G., McKinney, R., Sobel, R.:* Distribution of 14 C-formaldehyde after pulpotomy with formocresol. *J Am Dent Assoc* 96, 806-813 (1978).
145. *Myers, D., Shoaf, K., Dirksen, T., Pashley, D., Whitford, G., Reynolds, K.:* Acute toxicity of systemically administered formocresol. *J Dent Res* 58, 293, Abstr. #803 (1979).
146. *Nair, P. N., Sjögren, U., Figdor, D., Sundqvist, G.:* Persistent periapical radiolucencies of root-filled human teeth, failed endodontic treatments, and periapical scars. *Oral Surg Oral Med Oral Pathol* 87, 617-627 (1999).
147. *Nair, P. N., Sjögren, U., Krey, G., Kahnberg, K.-E., Sundqvist, G.:* Intraradicular bacteria and fungi in root-filled, asymptomatic human teeth with therapy-resistant periapical lesions: A long-term light and electron microscopic follow-up study. *J Endod* 16, 580-588 (1990).
148. *Nakamura, H., Sakakibara, F., Matsumoto, Y., Hirano, S., Hayakawa, H., Sakai, K., Morris, Y.:* Study on the cytotoxicity of root canal filling materials. *J Endod* 12, 156-160 (1986).
149. *Nicholls, E.:* Root filling techniques. *J Br Endod Soc* 12, 65-71 (1979).
150. *Nordenram, A. S., G.:* Results of apicectomy. *Svensk tandläk -T* 63, 593-604 (1970).
151. *Novak, L., Kvapilova, J., Strnad, L., Kratochvil, J.:* Unsere Ergebnisse nach der Wurzelspitzenresektion. *Zahnärztl Welt* 80, 102-105 (1971).

152. *Olson, A. K., Mac Pherson, G., Hartwell, G. R., Weller, N., Kulild, J. C.:* An in vitro evaluation of injectable thermoplasticized gutta-percha, glass ionomer, and amalgam when used as retrofilling materials. *J Endod* 16, 361-364 (1990).
153. *Oynick, J., Oynick, T.:* A study of a new material for retrograde fillings. *J Endod* 4, 203-206 (1978).
154. *Partsch, C.:* Über Wurzelresection. *Dtsch Monatsschr Zahnheilk* 17, 348-367 (1899).
155. *Pashley, D. H.:* Smear layer: physiological considerations. *Oper Dent* 9, 13-29 (1984).
156. *Peters, O. A., Göhring, T. N., Laib, A., Barbakow, F.:* Darstellung der dreidimensionalen Geometrie von Wurzelkanälen mittels hochauflösender Computertomographie. *Dtsch Zahnärztl Z* 55, 184-187 (2000).
157. *Petschelt, A.:* Endodontie: Maschinell - manuell? Die Aufbereitung und Spülung des Wurzelkanals. *Dtsch Zahnärztl Z* 44, 407-413 (1986).
158. *Pitts, D. L., Matheny, H. E., Nicholls, J. I.:* An in vitro study of spreader loads required to cause vertical root fracture during lateral condensation. *J Endod* 9, 544-550 (1983).
159. *Platzer, U., Sedelmayer, J.:* Die manuelle Wurzelkanalaufbereitung: Neue Instrumente-neue Techniken? In: *Hahn, W. H.* (Hrsg.): *Endodontie*. Carl Hanser Verlag, München 1993. S. 96.
160. *Poertzel, E., Petschelt, A.:* Bakterien in der Wurzelkanalwand bei Pulpagangrän. *Dtsch Zahnärztl Z* 41, 772-777 (1985).
161. *Porkaew, P., Retief, H., Barfield, R. D., Lacefield, W. R., Soong, S. J.:* Effects on calcium hydroxide paste as an intracanal medicament on apikal seal. *J Endod* 16, 369-374 (1990).
162. *Preiswerk, G.:* *Zahnheilkunde*. 1908.
163. *Robertson, D. C., Leeb, J. J.:* A clearing technique for the study of root canal system. *J Endod* 6, 421-424 (1980).
164. *Rosales, J. I., Vallecillo, M., Osorio, R., Bravo, M., Toledano, M.:* An in vitro comparison of micro leakage in three glass ionomer cements used as retrograde filling materials. *Int Dent J* 46, 15-21 (1996).
165. *Roulet, J.-F., Beringer, R.:* Gara didattica docenti-allievi. *Attualita Dentale* 1, 39-42 (1985).
166. *Rud, J., Andreasen, J. O.:* Operative procedures in periapical surgery with contemporaneous root filling. *Int J Oral Surg* 1, 297 (1972).

167. *Rud, J., Andreasen, J. O.:* A study of failures after endodontic surgery by radiographic, histologic and stereomicroscopic methods. *Int J Oral Surg* 1, 311-314 (1972).
168. *Rud, J., Andreasen, J. O., Jensen, J. E. M.:* A multivariate analysis of the influence of various factors upon healing after endodontic surgery. *Int J Oral Surg* 1, 258 (1972).
169. *Rud, J., Andreasen, J. O., Möller-Jensen, J. E.:* A follow-up study of 1000 cases treated by endodontic surgery. *Int J Oral Surg* 1, 215 (1972).
170. *Sailer, H., Pajarola, G.:* Wurzelspitzenresektion. In: *Rateitschak, K., Wolf, H.* (Hrsg.): *Orale Chirurgie*. Thieme, Stuttgart 1996. S. 160.
171. *Sargenti, A. G.:* Die rationalisierte Apektomie. Huber, Berlin 1951.
172. *Schafer, E.:* Effects of four instrumentation techniques on curved canals: a comparison study. *J Endod* 22, 685-689 (1996).
173. *Schilder, H.:* Cleaning and shaping the root canal. *Dent Clin North Am* 18, 269-296 (1974).
174. *Schmalz, G.:* Die Wurzelkanalbehandlung - Klinische Erfolge. *Dtsch Zahnärztl Z* 45, 251-256 (1990).
175. *Schröder, A.:* Endodontie - Ein Leitfaden für Studium und Praxis. Quintessenz, Berlin 1981.
176. *Schwartz, S. A., Alexander, J. B.:* A comparison of leakage between silver glass ionomer cement and amalgam retrofillings. *J Endod* 14, 385-391 (1988).
177. *Seltzer, S.:* Biological considerations in endodontic procedures. Lea & Febiger, Philadelphia 1988.
178. *Sen, B., Wesselink, P., Turkun, M.:* The smear layer: a phenomenon in root canal therapy. *Int Endod J* 28, 141-148 (1995).
179. *Siqueira Junior, J., Rocas, I., Favieri, A., Lima, K.:* Chemomechanical reduction of the bacterial population in the root canal after instrumentation and irrigation with 1%, 2.5%, and 5.25% sodium hypochlorite. *J Endod* 26, 331-334 (1999).
180. *Sjögren, U., Figdor, D., Persson, S., Sundqvist, G.:* Influence of infection at the time of root filling on the outcome of endodontic treatment of teeth with apical periodontitis. *Int Endod J* 30, 297-306 (1997).
181. *Spangberg, L. S. W., Acierno, T. G., Youblum, C. B.:* Influence of entrapped air on the accuracy of leakage studies using dye penetration methods. *J Endod* 15, 548-551 (1989).
182. *Spangberg, L. S. W., Barbosa, S. V., Lavigne, G. D.:* AH 26 releases formaldehyd.

- J Endod 19, 596-598 (1993).
183. *Spradling, R., Senia, E. S.*: The relative sealing ability of pastetype filling materials. J Endod 8, 543-549 (1982).
184. *Stabholz, A., Shani, J., Friedman, S., Abed, J.*: Marginal adaptation of retrograde fillings and its correlation with sealability. J Endod 11, 218-223 (1985).
185. *Stock, C. J., Gulabivala, K., Walker, R. T., Goodman, J. R.*: Color atlas and text of endodontics. Mosby, St. Louis 1995. S. 235-237.
186. *Sundqvist, G., Figdor, D.*: Endodontic treatment of apical periodontitis. Blackwell, Oxford 1998. S. 242-277.
187. *Sutimuntanakul, S., Worayoskowitz, W., Mangkornkarn, C.*: Retrograde seal in ultrasonically prepared canals. J Endod 26, 444-446 (2000).
188. *Svec, T., Harrison, J.*: The effect of effervescence on debridement of the apical regions of root-canals in single-rooted teeth. J Endod 7, 335-340 (1981).
189. *Szeremeta-Browar, T. L., Van Cura, J.E., Zaki, A.E.*: A comparison of the sealing properties of different retrograde techniques: An autoradiographic study. Oral Surg Oral Med Oral Pathol 59, 82-87 (1985).
190. *Takahara, K., Onodera, A., Matsumoto, K.*: Toxicity of root canal sealers on rat bone cells in primary culture. Endod Dent Traumatol 6, 200-202 (1990).
191. *Tamse, A.*: Comparison of apical leakage shown by four different dyes with two evaluating methods. Int Endod J 31, 333-337 (1998).
192. *Tetsch, P.*: Wurzelspitzenresektion. Carl Hanser Verlag, München 1986.
193. *Thoden van Velzen, S., Genet, J., Kersten, H., Moorer, W., Wesselink, P.*: Endodontie. Deutscher Ärzte-Verlag, Köln 1988. S. 145.
194. *Tronstad, L., Wennberg, A.*: In vitro assessment of the toxicity of filling materials. Int Endod J 13, 131-138 (1980).
195. *Tschamer, H.*: Kontrolle von Wurzelspitzenamputationen der Grazer Klinik. Öst Z Stomat 53, 486-488 (1956).
196. *Vahdaty, A., Pitt Ford, T., Wilson, R.*: Efficacy of chlorhexidine in disinfecting dentinal tubules in vitro. Endod Dent Traumatol 9, 243-248 (1993).
197. *Vertucci, F., Gegauff, A.*: Root canal morphology of the maxillary first premolar. J Am Dent Assoc 99, 194-198 (1979).
198. *Vertucci, F., Seelig, A., Gillis, R.*: Root canal morphology of the human maxillary second premolar. Oral Surg Oral Med Oral Pathol 38, 456-464 (1974).

199. *von Arx, T., Kurt, B., Ilgenstein, B., Hardt, N.*: Preliminary results and analysis of a new set of sonic instruments for root-end cavity preparation. *Int Dent J* 31, 32-38 (1998).
200. *Voß, A.*: Die Aufbereitung des gekrümmten Wurzelkanals. *Dtsch Zahnärztekalendar* 54, 79-114 (1995).
201. *Vulcain, J. M., Espie, J. H., Bayon, G., Laporte, A.*: Evaluation de l'efficacité ampliative des instruments endodontiques. *Rev Franc Endod* 2, 57-62 (1983).
202. *Walkhoff, H., O.*: Allgemeine Grundsätze für die moderne Therapie der Pulpaerkrankung. Barth, Leipzig 1949. S. 198-202.
203. *Walton, R.*: Histologic evaluation of different methods of enlarging the pulp canal space. *J Endod* 2, 304-311 (1976).
204. *Weine, F., Healey, Gerstein, H., Evanson, L.*: Pre-curved files and incremental instrumentation for root canal enlargement. *J Can Dent Assoc* 36, 155-157 (1970).
205. *Weine, F., Kelly, R., Bray, K.*: Effect of preparation with endodontic hand pieces on original canal shape. *J Endod* 2, 298-203 (1976).
206. *Weine, F., Kelly, R., Lio, P.*: The effect of preparation procedures on original canal shape and on apical foramen shape. *J Endod* 1, 262-266 (1975).
207. *Weine, F. S.*: Canal filling with semisolid materials. In: *Weine, F. S.* (Hrsg.): *Endodontic therapy*. Mosby, St. Louis 1982. S. 341.
208. *Weine, F. S.*: Intracanal treatment procedures, basic and advanced topics. In: *Weine, F. S.* (Hrsg.): *Endodontic therapy*. Mosby, St. Louis 1982. S. 256.
209. *Wesselink, P.*: Efficacy of three techniques in cleaning the apical portion of curved root canals. *Oral Surg Oral Med Oral Pathol* 79, 492-496 (1995).
210. *Whitworth, M. J., Seccombe, G. V., Shoker, K. Steele, J. G.*: Use of rubber dam and irrigant selection in UK general dental practice. *Int Endod J* 33, 435-441 (2000).
211. *Winklmaier, O.*: Grundsätzliche Fragen zum Problem der Wurzelfüllung bei der Radikaloperation der chronischen Parodontitis. *Dtsch Zahnärztl Z* 3, 1-28, 217-237 (1948).
212. *Wong, M., Peters, D. D., Lorton, L.*: Comparison of gutta-percha filling techniques, compaction (mechanical), vertical (warm) and lateral condensation technique. *J Endod* 7, 500-501 (1981).
213. *Wörle, M.*: Die Wurzelspitzenresektion an Molaren. *Zahnärztl Welt* 90, 50 (1981).
214. *Wörle, M., Wirsching, R.*: Die Wurzelspitzenresektion im Seitenzahnbereich als Alternative zum Implantat. *Dtsch Zahnärztl Z* 32, 340-342 (1977).

215. *Wu, M. K., Wesselink, P. R.*: Endodontic leakage reconsidered. Part I. Methodology, application and relevance. *J Endod* 26, 37-43 (1993).
216. *Wu, M. K., Wesselink, P. R.*: Überlegungen zum apikalen Endpunkt der Wurzelkanalbehandlung. *Endodontie* 1, 9-18 (2001).
217. *Yesilsoy, C., Whitaker, E., Cleveland, D., Phillips, E., Trope, M.*: Antimicrobial and toxic effects of established and potential root canal irrigants. *J Endod* 21, 513-515 (1995).