

เอกสารอ้างอิง

1. Dérand P, Dérand T. Bond strength of luting cements to zirconium oxide ceramics. *Int J Prosthodont* 2000; 13: 131-135.
2. Wolfart M, Lehmann F, Wolfart S, Kern M. Durability of the resin bond strength to zirconia ceramic after using different surface conditioning methods. *Dent Mater* 2007; 23: 45-50.
3. Ernst CP, Cohnen U, Stender E, Willershausen B. In vitro retentive strength of zirconium oxide ceramic crowns using different luting agents. *J Prosthet Dent* 2005; 93: 551-558.
4. Nakamura S, Yoshida K, Kamada K, Atsuta M. Bonding between resin luting cement and glass infiltrated alumina-reinforced ceramics with silane coupling agent. *J Oral Rehabil* 2004; 31: 785-789.
5. Valandro LF, Leite FP, Scotti R, Bottino MA, Neisser MP. Effect of ceramic surface treatment on the microtensile bond strength between a resin cement and an alumina-based ceramic. *J Adhes Dent* 2004; 6: 327-332.
6. Bottino MA, Valandro LF, Scotti R, Buso L. Effect of surface treatments on the resin bond to zirconium-based ceramic. *Int J Prosthodont* 2005; 18: 60-65.
7. Jardel V, Degrange M, Picard B, Derrien G. Correlation of topography to bond strength of etched ceramic. *Int J Prosthodont* 1999; 12: 59-64.
8. Söderholm KJ, Shang SW. Molecular orientation of silane at the surface of colloidal silica. *J Dent Res* 1993; 72: 1050-1054.
9. Della Bona A, Anusavice KJ, Shen C. Microtensile strength of composite bonded to hot-pressed ceramics. *J Adhes Dent* 2000; 2: 305-313.
10. Debnath S, Wundera SL, McCool JI, Baran GR. Silane treatment effects on glass/resin interfacial shear strengths. *Dent Mater* 2003; 19: 441-448.
11. Madani M, Chu FC, McDonald AV, Smales RJ. Effects of surface treatments on shear bond strengths between a resin cement and an alumina core. *J Prosthet Dent* 2000; 83: 644-647.

12. Özcan M, Alkumru HN, Gemalmaz D. The effect of surface treatment on the shear bond strength of luting cement to a glass-infiltrated alumina ceramic. *Int J Prosthodont* 2001; 14: 335-339.
13. Özcan M, Alkumru HN, Gemalmaz D. The effect of surface treatment on the shear bond strength of luting cement to a glass-infiltrated alumina ceramic. *Int J Prosthodont* 2001; 14: 335-339.
14. Qualtrough AJ, Piddock V. Dental ceramics: what's new? *Dent Update* 2002; 29: 25-33.
15. Kern M, Wegner SM. Bonding to zirconia ceramic: adhesion methods and their durability. *Dent Mater* 1998; 14: 64-71.
16. Wegner SM, Kern M. Long-term resin bond strength to zirconia ceramic. *J Adhes Dent* 2000; 2: 139-147.
17. Wegner SM, Gerdes W, Kern M. Effect of different artificial aging conditions on ceramic-composite bond strength. *Int J Prosthodont* 2002; 15: 267-272.
18. Özcan, M. The use of chairside silica coating for different dental applications: a clinical report. *J Prosthet Dent* 2002; 87: 469-472.
19. Piwowarczyk A, Lauer HC, Sorensen JA. The shear bond strength between luting cements and zirconia ceramics after two pre-treatments. *Oper Dent* 2005; 30: 382-388.
20. Tsuo Y, Yoshida K, Atsuta M. Effects of alumina-blasting and adhesive primers on bonding between resin luting agent and zirconia ceramics. *Dent Mater J.* 2006 ; 25: 669-674.
21. O'Brien JW. Editor. *Dental material and their selection*. 2nd ed. Quintessence Publishing Co, Inc, Chicago, pp. 165-167, 1997.
22. Burgess JO, Latta MA, White RC. ADA professional product review: Dual cure resin-based cements : Expert panel discussion. Volume 1: Issue 2 Fall 2006 (online)
www.ada.org/goto/ppr
23. Moura SK, Pelizzaro A, Dal Bianco K, Goes MF, Loguercio AD, Reis A, Grande RH. Does the acidity of self-etching primers affect bond strength and surface morphology of enamel. *J Adhes Dent* 2006; 8: 75-83.
24. Walker MP, Wang Y, Swafford J, Evans A, Spencer P. Influence of additional acid etch treatment on resin cement dentin infiltration. *J Prosthodont.* 2000; 9: 77-81.

25. Hikita K, Van Meerbeek B, De Munck J, Ikeda T, Van Landuyt K, Maida T, Lambrechts P, Peumans M. Bonding effectiveness of adhesive luting agents to enamel and dentin. *Dent Mater* 2007; 23: 71-80.
26. De Munck J, Vargas M, Van Landuyt K, Hikita K, Lambrechts P, Van Meerbeek B. Bonding of an auto-adhesive luting material to enamel and dentin. *Dent Mater*.2004; 20: 963-971.
27. Anusavice JK. 2003. *Phillips' Science of Dental Materials*. Saunders company, Florida.
28. Noort VR. 2003. *Introduction to dental materials*. Elsevier Health Sciences, New York.
29. Zirconia ceramic in dental CAD-CAM: How CAD/CAM technology enables zirconia to replace metal in restorative dentistry. Available from URL http://www.oratio.nl/downloads/publications/2006_Cyrtina_dental_CAD-CAM.pdf (2007, July)
30. Kelly JR. Dental Ceramics: current thinking and trends. *Dent Clin North Am* 2004; 48: 513–530.
31. Pilathadka S, Vahalova D. Contemporary all-ceramic materials, part-1. *Acta Medica* 2007; 50: 101–104.
32. Tinschert J, Zvez D, Marx R, Anusavice KJ. Structural reliability of alumina-, feldspar-, leucite-, mica- and zirconia-based ceramics. *J Dent* 2000; 28: 529-535.
33. McMillan PW. 1979. *Glass-Ceramics*. Academic Press Inc, London.
34. Glass ceramic. Available from URL http://www.doctorspiller.com/ceramics_4.htm (2000, April)
35. Ironside JG, Swain MV. A review and critical issues of dental ceramics. *J. Aust Ceram Soc* 1998; 34; 78-91.
36. Atsu SS, Kilicarlan MA, Kucukesmen HC, Aka PS. Effect of zirconium-oxide ceramic surface treatments on the bond strength to adhesive resin. *J Prosthet Dent* 2006; 95: 430-436.
37. Creative ceramic concepts & procedures zirconia. Available from URL <http://www.nobelbiocare.com> (2007, July)
38. The yttrium tetragonal zirconia polycrystals (Y-TZP) infrastructure: The new chapter in the search for a metal framework replacement. Available from URL

<http://www.ordredesdentistesduquebec.qc.ca/publications/images/pdf/>

Prosthodontic_2005_04_En.pdf (2007, July)

39. Cercon™ zirconia a system solution for reliable metal-free multi-unit restorations. Available from URL
<http://www.ceramco.com/pdf/cercon/Conservative%20Options%20in%20Metal%20Free%20Restorative%20Dentistry.pdf> (2007, July)
40. Cehreli MC, Kökat AM, Akça K. CAD/CAM Zirconia vs. slip-cast glass-infiltrated Alumina/Zirconia all-ceramic crowns: 2-year results of a randomized controlled clinical trial. *J Appl Oral Sci* 2009; 17: 49-55.
41. Att W, Grigoriadou M, Strub JR. ZrO₂ three-unit fixed partial dentures: Comparison of failure load before and after exposure to a mastication simulator. *J Oral Rehabil* 2007; 34: 282-290.
42. Raigrodski AJ. All-ceramic full-coverage restorations: Concepts and guidelines for material selection. *Pract Proced Aesthet Dent* 2005; 17: 249-256.
43. McLaren EA, White SN. Glass-infiltrated zirconia/alumina-based ceramic for crowns and fixed partial dentures. *Pract Periodontics Aesthet Dent* 1999; 11: 985-994.
44. Heimann RB. Materials science of crystalline bioceramics: a review of basic properties and applications. *CMU J* 2002; 1: 23-47.
45. Transformation toughening. Available from URL
http://www.britanica.com/eblart_226/Resistance-to-cracking-in-transformatuion-toughen-zirconia (2007, July)
46. งามจิต อิงคะสุทธิ. ระบบการยึดติด. วารสารสมาคมทันตกรรมประดิษฐ์ 2006; 1: 30 – 40.
47. Matinlinna JP, Lassila LV, Vattittu PK. Evaluation of five dental silanes on bonding a luting cement onto silica-coated titanium. *J Dent* 2006; 34: 721- 726.
48. Matinlinna JP, Özcan M, Lassila LV, Vallittu PK. The effect of a 3-methacryloxy-propyltrimethoxysilane and vinyltrisopropoxysilane blend and tris (3-trimethoxysilylpropyl) isocyanurate on the shear bond strength of composite resin to titanium metal. *Dent Mater* 2004; 20: 804-813.

49. Van Meerbeek B, Perdigão J, Lambrechts P, Vanherle G. The clinical performance of adhesives. *J Dent* 1998; 26: 1-20.
50. Yoshida K, Yamashita M, Atsuta M. Bond strength between machinable glass-ceramic and dual-cured resin luting cements using silane coupling agents. *Am J Dent* 2005; 18: 327-330.
51. Akgüngör G, Sen D, Aydın M. Influence of different surface treatments on the short-term bond strength and durability between a zirconia post and a composite resin core material. *J Prosthet Dent* 2008; 99: 388-399. Blatz MB, Sadan A, Kern M. Resin-ceramic bonding: a review of the literature. *J Prosthet Dent* 2003; 89: 268-274.
52. Sarafianou A, Seimenis I, Papadopoulos T. Effectiveness of different adhesive primers on the bond strength between an indirect composite resin and a base metal alloy. *J Prosthet Dent* 2008; 99: 377-387.
53. Blatz MB, Chiche G, Holst S, Sadan A. Influence of surface treatment and simulated aging on bond strengths of luting agents to zirconia. *Quintessence Int* 2007; 38: 745-753.
54. Sirimongkolwattana S. Metal adhesive primer. *CM Dent J* 2005; 26: 73-82.
55. Yoshida K, Taira Y, Matsumura H, Atsuta M. Effect of adhesive primers on bonding a prosthetic composite resin to metals. *J Prosthet Dent* 1993; 69: 357-362.
56. Watanabe I, Hotta M, Watanabe E, Atsuta M, Okabe T. Shear bond strengths of laboratory-cured prosthetic composite to primed metal surfaces. *Am J Dent* 2003 ; 16: 401-403.
57. Yanagida H, Matsumura H, Atsuta M. Bonding of prosthetic composite material to Ti-6Al-7Nb alloy with eight metal conditioners and a surface modification technique. *Am J Dent* 2001; 14: 291-294.
58. Matsumura H, Shimoe S, Nagano K, Atsuta M. Effect of noble metal conditioners on bonding between prosthetic composite material and silver-palladium-copper-gold alloy. *J Prosthet Dent* 1999 ; 81: 710-714.
59. Yoshida T, Yamaguchi K, Tsubota K, Takamizawa T, Kurokawa H, Rikuta A, Ando S, Miyazaki M. Effect of metal conditioners on polymerization behavior of bonding agents. *J Oral Sci* 2005; 47: 171-175.

60. Atsuta M, Matsumura H, Tanaka T. Bonding fixed prosthodontic composite resin and precious metal alloys with the use of a vinyl-thiol primer and an adhesive opaque resin. *J Prosthet Dent* 1992; 67: 296-300.
61. Watanabe I, Matsumura H, Atsuta M. Effect of two metal primers on adhesive bonding with type IV gold alloys. *J Prosthet Dent* 1995; 73: 299-303.
62. Silikas N, Wincott PL, Vaughan D, Watts DC, Eliades G. Surface characterization of precious alloys treated with thione metal primers. *Dent Mater* 2007; 23: 665-673.
63. Antoniadou M, Kern M, Strub JR. Effect of a new metal primer on the bond strength between a resin cement and two high-noble alloys. *J Prosthet Dent* 2000; 84: 554-560.
64. Lindgren J, Smeds J, Sjögren G. Effect of surface treatments and aging in water on bond strength to zirconia. *Oper Dent* 2008; 33: 675-681.
65. Özcan M, Nijhuis H, Valandro LF. Effect of various surface conditioning methods on the adhesion of dual-cure resin cement with MDP functional monomer to zirconia after thermal aging. *Dent Mater J* 2008; 27: 99-104.
66. Yoshida K, Atsuta M. Effects of adhesive primers for noble metals on shear bond strengths of resin cements. *J Dent* 1997; 25: 53-58.
67. Yanagida H, Matsumura H, Taira Y, Atsuta M, Shimoe S. Adhesive bonding of composite material to cast titanium with varying surface preparations. *J Oral Rehabil* 2002; 29: 121-126.
68. Yoshida K, Tsuo Y, Atsuta M. Bonding of dual-cured resin cement to zirconia ceramic using phosphate acid ester monomer and zirconate coupler. *J Biomed Mater Res part B: Appl Biomater* 2006; 77: 28-33.
69. Pilathadka S, Vahalova D. Contemporary all-ceramic systems, Part-2. *Acta Medica* 2007; 50: 105-107.
70. Edelhoff D, Özcan M. To what extent does the longevity of fixed dental prostheses depend on the function of the cement? Working group 4 materials: cementation. *Clin Oral Implants Res* 2007; 18: 193-204.
71. Burke FJ, Fleming GJ, Nathanson D, Marquis PM. Are adhesive technologies needed to support ceramics? An assessment of the current evidence. *J Adhes Dent* 2002; 4: 7-22.

72. Blatz MB, Sadan A, Martin J, Lang B. In vitro evaluation of shear bond strengths of resin to densely-sintered high-purity zirconium-oxide ceramic after long-term storage and thermal cycling. *J Prosthet Dent* 2004; 91: 356-362.
73. Thurmond JW, Barkmeier WW, Wildwerding TM. Effect of porcelain surface treatments on bond strengths of composite resin bonded to porcelain. *J Prosthet Dent* 1994; 72: 355–359.
74. Özcan M, Pfeiffer P, Nergiz I. A brief history and current status of metal- and ceramic surface conditioning concepts for resin bonding in dentistry. *Quintessence Int* 1998; 29: 713-724.
75. Kuraray Co., Ltd. Panavia Technical Information. Report No. US089, Osaka, Japan; 1999.
76. De Munck J, Vargas M, Van Landuyt K, Hikita K, Lambrechts P, Van Meerbeek B. Bonding of an auto-adhesive luting materials to enamel and dentin. *Dent Mater* 2004; 20: 963–971.
77. Yap AU, Tan AC, Goh AT, Goh DC, Chin KC. Effect of surface treatment and cement maturation on the bond strength of resin-modified glass ionomers to dentin. *Oper Dent* 2003; 28: 728–733.
78. Phark JH, Duarte S Jr, Blatz M, Sadan A. An in vitro evaluation of the long-term resin bond to a new densely sintered high-purity zirconium-oxide ceramic surface. *J Prosthet Dent* 2009; 101: 29-38.
79. Meşe A, Burrow MF, Tyas MJ. Sorption and solubility of luting cements in different solutions. *Dent Mater J* 2008; 27: 702-709.
80. Technical product profile Rely X™ Unicem. Available from URL <http://multimedia.mmm.com/mws/mediawebserver.dyn?6666660Zjcf6lVs6EVs666iFPC> OrrrrQ-(2007, March)
81. Söderholm KJ, Roberts MJ. Influence of water exposure on the tensile strength of composites. *J Dent Res* 1990; 69: 1812–1816.
82. Mair LH. Surface permeability and degradation of dental composites resulting from oral temperature changes. *Dent Mater* 1989; 5: 247-255.

83. Musto P, Ragosta G, Scarinza G, Mascia L. Probing the molecular interactions in the diffusion of water through epoxy and epoxy-bismaleimide networks. *J Polym Sci Part B: Polym Phys* 2002; 40: 922–938.
84. Indrani DJ, Cook WD, Televantos F, Tyas MJ, Harcourt JK. Fracture toughness of water-aged resin composite restorative materials. *Dent Mater* 1995; 11: 201-207.
85. Özcan M, Vallittu PK. Effect of surface conditioning methods on the bond strength of luting cement to ceramics. *Dent Mater* 2003; 19: 725-731.
86. Matinlinna JP, Lassila LV, Vallittu PK. Pilot evaluation of resin composite cement adhesion to zirconia using a novel silane system. *Acta Odontol Scand* 2007; 65: 44–51.
87. Aboushelib MN, Matinlinna JP, Salameh Z, Ounsi H. Innovations in bonding to zirconia-based materials: part I. *Dent Mater* 2008; 24: 1268-1272.
88. Borges GA, Sophr AM, de Goes MF, Sobrinho LC, Chan DC. Effect of etching and airborne particle abrasion on the microstructure of different dental ceramics. *J Prosthet Dent* 2003; 89: 479-488.
89. de Oyagüe RC, Monticelli F, Toledano M, Osorio E, Ferrari M, Osorio R. Influence of surface treatments resin cement selection on bonding to densely-sintered zirconium-oxide ceramic. *Dent Mater* 2009; 25: 172-179.
90. Zhang Y, Lawn BR, Rekow ED, Thompson VP. Effect of sandblasting on the long-term performance of dental ceramics. *J Biomed Mater Res B Appl Biomater* 2004; 71: 381-386.
91. Fleming GJ, Jandu HS, Nolan L, Shaini FJ. The influence of alumina abrasion and cement lute on the strength of a porcelain laminate veneering material. *J Dent* 2004; 32: 67–74.
92. Addison O, Fleming GJ. The influence of cement lute, thermocycling and surface preparation on the strength of a porcelain laminate veneering material. *Dent Mater* 2004; 20: 286–292.
93. Kosmac T, Oblak C, Jevnikar P, Funduk N, Marion L. Strength and reliability of surface treated Y-TZP dental ceramics. *J Biomed Mater Res* 2000; 53: 304–313.
94. Kosmac T, Oblak C, Jevnikar P, Funduk N, Marion L. The effect of surface grinding and sandblasting on flexural strength and reliability of Y-TZP zirconia ceramic. *Dent Mater* 1999; 15: 426–433.

95. Kumbuloglu O, Lassila LV, User A, Vallittu PK. Bonding of resin composite luting cements to zirconium oxide by two air-particle abrasion methods. *Oper Dent* 2006; 31: 248–255.
96. Yang B, Barloi A, Kern M. Influence of air-abrasion on zirconia ceramic bonding using an adhesive composite resin. *Dent Mater* 2010; 26: 44-50.
97. Taira Y, Imai Y. Primer for bonding resin to metal. *Dent Mater* 1995; 11: 2-6.
98. Yoshida K, Kamada K, Atsuta M. Adhesive primers for bonding cobalt-chromium alloy to resin. *J Oral Rehabil* 1999; 26: 475-478.
99. Polat ZS, Tacir IH, Eskimez S, Celik MY. Retentive force of three fiber-reinforced resin composite posts and a zirconia post cemented with two adhesive luting agents: in vitro study. *Dent Mater J* 2007; 26: 672-676.
100. Kuraray Co., Ltd. ALLOY PRIMER study and manual. Available from URL http://www.kuraray-dental.eu/en_gb/images/stories/downloads/en/alloy_primer_gb.pdf (1999, January)
101. Valandro LF, Bona AD, Bottino MA, Neisser MP. The effect of ceramic surface treatment on bonding to densely sintered alumina ceramic. *J Prosthet Dent* 2005; 93: 253–259.
102. Palacios RP, Johnson GH, Phillips KM, Raigrodski AJ. Retention of zirconium oxide ceramic crowns with three types of cement. *J Prosthet Dent* 2006; 96: 104–114.
103. Valandro LF, Özcan M, Bottino MC, Bottino MA, Scotti R, Bona AD. Bond strength of a resin cement to high-alumina and zirconia-reinforced ceramics: the effect of surface conditioning. *J Adhes Dent* 2006; 8: 175–181.
104. Kern M, Thompson VP. Durability of resin bonds to pure titanium. *J Prosthodont.* 1995; 4: 16-22.
105. Koizumi H, Furuchi M, Tanoue N, Yanagida H, Yoneyama T, Matsumura H. Bond strength to primed Ti-6Al-7Nb alloy of two acrylic resin adhesives. *Dent Mater J* 2006; 25: 286-290.
106. Yun JY, Ha SR, Lee JB, Kim SH. Effect of sandblasting and various metal primers on the shear bond strength of resin cement to Y-TZP ceramic. *Dent Mater* 2010; 26: 650-658.

107. de Souza GM, Silva NR, Paulillo LA, De Goes MF, Rekow ED, Thompson VP. Bond strength to high-crystalline content zirconia after different surface treatments. *J Biomed Mater Res B Appl Biomater* 2010; 93: 318-323.
108. Taira Y, Yanagida H, Matsumura H, Yoshida K, Atsuta M, Suzuki S. Adhesive bonding of titanium with a thione-phosphate dual functional primer and self-curing luting agents. *Eur J Oral Sci* 2000; 108: 456-460.
109. Phosphonic-acid-generic. Available from URL <http://commons.wikimedia.org/wiki/File:Phosphonic-acid-generic.png> (2007, January)
110. Ikemura K, Endo T. A review of our development of dental adhesives - effects of radical polymerization initiators and adhesive monomers on adhesion. *Dent Mater J* 2010; 29: 109-121.
111. Ikemura K, Tay FR, Nishiyama N, Pashley DH, Endo T. Design of new phosphonic acid monomers for dental adhesives - synthesis of (meth) acryloxyalkyl 3-phosphonopropionates and evaluation of their adhesion-promoting functions. *Dent Mater J* 2006; 25: 566-575.
112. Van Landuyt KL, Yoshida Y, Hirata I, Snauwaert J, De Munck J, Okazaki M, Suzuki K, Lambrechts P, Van Meerbeek B. Influence of the chemical structure of functional monomers on their adhesive performance. *J Dent Res* 2008; 87: 757-761.
113. Shillingburg HT, Hobo S, Whitsett LD. *Fundamental of fixed prosthodontics*. Quintessence publishing Co, Inc, Chicago, pp. 67, 1978.