

# DRDPDMAT - DRDP: Applied Clinical Dental Materials

[View Online](#)

[1]

M. G. Botelho, 'Inhibitory Effects on Selected Oral Bacteria of Antibacterial Agents Incorporated in a Glass Ionomer Cement', *Caries Research*, vol. 37, no. 2, pp. 108–114, 2003, doi: 10.1159/000069019.

[2]

M. Brännström and H. Nyborg, 'Points in the experiential study of pulpal response to restorative materials', *Odontologisk tidskrift*, vol. 77, pp. 421–426, 1969.

[3]

M. G. Buonocore, 'A simple method of increasing the adhesion of acrylic filling materials to enamel surfaces', *Journal of Dental Research*, vol. 34, no. 6, pp. 849–853, 1955 [Online]. Available:  
<http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=ddh&AN=36487705&site=ehost-live&scope=site>

[4]

J. De Munck et al., 'A Critical Review of the Durability of Adhesion to Tooth Tissue: Methods and Results', *Journal of Dental Research*, vol. 84, no. 2, pp. 118–132, Feb. 2005, doi: 10.1177/154405910508400204.

[5]

I. Kramer and J. McLean, 'Alterations in the staining reactions of dentine resulting from a constituent of a new self-polymerising resin', *British Dental Journal*, vol. 93, pp. 150–153, 1952.

[6]

S. Matharu et al., 'A new in vitro model for the study of microbial microleakage around dental restorations: a preliminary qualitative evaluation', International Endodontic Journal, vol. 34, no. 7, pp. 547–553, Oct. 2001, doi: 10.1046/j.1365-2591.2001.00475.x.

[7]

M. Peumans and et.al., 'Clinical effectiveness of contemporary adhesives: A systematic review of current clinical trials', Dental Materials, vol. 21, no. 9, pp. 864–881, Sep. 2005, doi: 10.1016/j.dental.2005.02.003.

[8]

C. Splieth and et.al., 'Anaerobic microflora under Class I and Class II composite and amalgam restorations', Quintessence international, vol. 34, no. 7, pp. 497–503, 2003 [Online]. Available:  
<http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=ddh&AN=37298503&site=ehost-live&scope=site>

[9]

K. L. Van Landuyt and et.al., 'Systematic review of the chemical composition of contemporary dental adhesives', Biomaterials, vol. 28, no. 26, pp. 3757–3785, Sep. 2007, doi: 10.1016/j.biomaterials.2007.04.044.

[10]

G. Eick, A. Gwinnett, D. Pashley, and S. Robinson, 'Current concepts on adhesion to dentin.', Critical reviews in oral biology and medicine, vol. 8, no. 3, pp. 306–335, 1997, doi: 10.1177/10454411970080030501.

[11]

M. Hannig, K. Reinhardt, and B. Bott, 'Self-etching primer vs phosphoric acid: an alternative concept for composite-to-enamel bonding', Operative dentistry, vol. 24, no. 3, pp. 172–180, 1999.

[12]

M. Hashimoto, H. Ohno, M. Kaga, K. Endo, H. Sano, and H. Oguchi, 'In vivo Degradation of Resin-Dentin Bonds in Humans Over 1 to 3 Years', *Journal of Dental Research*, vol. 79, no. 6, pp. 1385–1391, Jun. 2000, doi: 10.1177/00220345000790060601.

[13]

H. Sano and et.al., 'Nanoleakage: leakage within the hybrid layer.', *Operative Dentistry*, vol. 20, no. 1, pp. 18–25, 1995.

[14]

R. BRAGA, R. BALLESTER, and J. FERRACANE, 'Factors involved in the development of polymerization shrinkage stress in resin-composites: A systematic review', *Dental Materials*, vol. 21, no. 10, pp. 962–970, Oct. 2005, doi: 10.1016/j.dental.2005.04.018.

[15]

F. Burke, W. Palin, A. James, L. Mackenzie, and P. Sands, 'The current status of materials for posterior composite restorations: the advent of low shrink.', *Dental Update*, vol. 36, no. 7, pp. 401–409, 2009.

[16]

M. CHEN, C. CHEN, S. HSU, S. SUN, and W. SU, 'Low shrinkage light curable nanocomposite for dental restorative material', *Dental Materials*, vol. 22, no. 2, pp. 138–145, Feb. 2006, doi: 10.1016/j.dental.2005.02.012.

[17]

E. Combe and F. Burke, 'Contemporary Resin-based Composite Materials for Direct Placement Restorations: Packables, Flowables and Others', *Dental Update. Leading Dental Journal for CPD*, vol. 27, no. 7, pp. 326–336, 2000.

[18]

C. L. Davidson and A. J. Feilzer, 'Polymerization shrinkage and polymerization shrinkage stress in polymer-based restoratives', *Journal of Dentistry*, vol. 25, no. 6, pp. 435–440,

Nov. 1997, doi: 10.1016/S0300-5712(96)00063-2.

[19]

A. J. Feilzer, A. J. De Gee, and C. L. Davidson, 'Setting stress in composite resin in relation to configuration of the restoration', *Journal of Dental Research*, vol. 66, no. 11, pp. 1636-1639, 1987 [Online]. Available: <http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=ddh&AN=36543133&site=ehost-live&scope=site>

[20]

K. Leinfelder, 'New developments in resin restorative systems', *The Journal of the American Dental Association*, vol. 128, no. 5, pp. 573-581, 1997, doi: 10.14219/jada.archive.1997.0256.

[21]

W. H. Liebenberg, 'Assuring restorative integrity in extensive posterior resin composite restorations: Pushing the envelope ', *Quintessence International*, vol. 31, no. 3, pp. 153-164, 2000.

[22]

B. J. Millar, F. Abider, and J. W. Nicholson, 'In vitro caries inhibition by polyacid-modified composite resins ("compomers")', *Journal of Dentistry*, vol. 26, no. 2, pp. 133-136, Mar. 1998, doi: 10.1016/S0300-5712(96)00091-7.

[23]

W. Palin and G. Fleming, 'Low-shrink monomers for dental restorations. ', *Dental Update*, vol. 30, no. 3, pp. 118-122, 2003.

[24]

A. J. Shaw, T. Carrick, and J. F. McCabe, 'Fluoride release from glass-ionomer and compomer restorative materials: 6-month data', *Journal of Dentistry*, vol. 26, no. 4, pp. 355-359, May 1998, doi: 10.1016/S0300-5712(97)00016-X.

[25]

S. Gladys, 'Comparative physico-mechanical characterisation of new hybrid restorative materials with contemporary glass-ionomer and resin composite restorative materials', Journal of Dental Research, vol. 76, no. 4, pp. 883-894.

[26]

Versluis, A., 'Do Dental Composites Always Shrink Toward the Light?', Journal of Dental Research, vol. 77, no. 6, pp. 1435-1445.

[27]

ANUSAVICE, K. J., 'Strengthening of Feldspathic Porcelain by Ion Exchange and Tempering.', Journal of Dental Research, vol. 71, no. 71, pp. 1134-1138.

[28]

F. Burke, 'Fracture resistance of teeth restored with dentin-bonded crowns: the effect of increased tooth preparation.', Quintessence international, vol. 27, no. 2, pp. 115-121, 1996.

[29]

F. Burke, 'Trends in Indirect Dentistry: 3. Luting Materials ', Dental Update. Leading Dental Journal for CPD, vol. 32, no. 5, pp. 251-260, 2005.

[30]

F. Burke, 'Trends in indirect Dentistry: 4. Performance of Adhesive Restoratives', Dental Update. Leading Dental Journal for CPD, vol. 32, no. 6, pp. 312-325, 2005.

[31]

F. J. T. Burke and A. J. E. Qualtrough, 'Follow-up Evaluation of a Series of Dentin-Bonded Ceramic Restorations', Journal of Esthetic and Restorative Dentistry, vol. 12, no. 1, pp. 16-22, Jan. 2000, doi: 10.1111/j.1708-8240.2000.tb00194.x.

[32]

Chris and A. E. Ellakwa, 'DENTAL MATERIALS Fibre-reinforced Composites in Restorative Dentistry', *Dental Update. Leading Dental Journal for CPD*, vol. 30, no. 6, pp. 300–306, 2003.

[33]

L.-R. CHO, Y.-J. YI, and S.-J. HEO, 'Effect of tooth brushing and thermal cycling on a surface change of ceromers finished with different methods', *Journal of Oral Rehabilitation*, vol. 29, no. 9, pp. 816–822, Sep. 2002, doi: 10.1046/j.1365-2842.2002.00877.x.

[34]

W. D. Cook and M. Johannson, 'The influence of postcuring on the fracture properties of photo-cured dimethacrylate based dental composite resin', *Journal of Biomedical Materials Research*, vol. 21, no. 8, pp. 979–989, Aug. 1987, doi: 10.1002/jbm.820210804.

[35]

M. K. Etman and M. J. Woolford, 'Three-year clinical evaluation of two ceramic crown systems: A preliminary study', *The Journal of Prosthetic Dentistry*, vol. 103, no. 2, pp. 80–90, Feb. 2010, doi: 10.1016/S0022-3913(10)60010-8.

[36]

B. Fissore, J. I. Nicholls, and R. A. Yuodelis, 'Load fatigue of teeth restored by a dentin bonding agent and a posterior composite resin', *The Journal of Prosthetic Dentistry*, vol. 65, no. 1, pp. 80–85, Jan. 1991, doi: 10.1016/0022-3913(91)90054-Z.

[37]

R. A. Giordano, L. Pelletier, S. Campbell, and R. Pober, 'Flexural strength of an infused ceramic, glass ceramic, and feldspathic porcelain', *The Journal of Prosthetic Dentistry*, vol. 73, no. 5, pp. 411–418, May 1995, doi: 10.1016/S0022-3913(05)80067-8.

[38]

N. Krämer, R. Frankenberger, M. Pelka, and A. Petschelt, 'IPS Empress inlays and onlays after four years — a clinical study', *Journal of Dentistry*, vol. 27, no. 5, pp. 325–331, Jul. 1999, doi: 10.1016/S0300-5712(98)00059-1.

[39]

K. Leinfelder, 'New developments in resin restorative systems', *New developments in resin restorative systems*, vol. 128, no. 5, pp. 573–581, 1997, doi: 10.14219/jada.archive.1997.0256.

[40]

S. F. Rosenstiel, P. K. Gupta, R. A. Van Der Sluys, and M. H. Zimmerman, 'Strength of a dental glass-ceramic after surface coating', *Dental Materials*, vol. 9, no. 4, pp. 274–279, Jul. 1993, doi: 10.1016/0109-5641(93)90074-Z.

[41]

P. Magne and W. H. Douglas, 'Porcelain veneers: dentin bonding optimization and biomimetic recovery of the crown', *The International journal of prosthodontics*, vol. 12, no. 2, pp. 111–121, 1999.

[42]

K. Zeng, A. Oden, and D. Rowcliffe, 'Evaluation of Mechanical Properties of Dental Ceramic Core Materials in Combination With Porcelains', *The International journal of prosthodontics*, vol. 11, no. 2, pp. 183–189, 1998.

[43]

T. Nakamura, T. Ohyama, A. Imanishi, T. Nakamura, and S. Ishigaki, 'Fracture resistance of pressable glass-ceramic fixed partial dentures', *Journal of Oral Rehabilitation*, vol. 29, no. 10, pp. 951–955, Oct. 2002, doi: 10.1046/j.1365-2842.2002.00929.x.

[44]

A. N. Stokes and J. A. A. Hood, 'Impact fracture characteristics of intact and crowned human central incisors', *Journal of Oral Rehabilitation*, vol. 20, no. 1, pp. 89–95, Jan. 1993, doi: 10.1111/j.1365-2842.1993.tb01518.x.

[45]

'Amalgam alternatives - micro-leakage evaluation of clinical procedures. Part I: direct composite/composite inlay/ceramic inlay', Journal of Oral Rehabilitation, vol. 25, no. 6, pp. 443-447, Jun. 1998, doi: 10.1046/j.1365-2842.1998.00257.x.

[46]

M. Valenti and A. Valenti , 'Retrospective survival analysis of 261 lithium disilicate crowns in a private general practice ', Quintessence International, vol. 40, no. 7, pp. 573-579, 2009.

[47]

Denry, I. L., 'Effect of Ion Exchange on the Microstructure, Strength, and Thermal Expansion Behavior of a Leucite-reinforced Porcelain. Effect of Ion Exchange on the Microstructure, Strength, and Thermal Expansion Behavior of a Leucite-reinforced Porcelain.', Journal of Dental Research, vol. 77, no. 4, pp. 583-588.

[48]

M. Andersson , M. E. Razzoog, A. Oden, E. A. Hegenbarth, and B. R. Lang, 'PROCERA: A new way to achieve an all-ceramic crown ', Quintessence International, vol. 29, no. 5, pp. 185-196, 1998.

[49]

M. A. Bergman, 'The Clinical performance of ceramic inlays: A review', Australian Dental Journal, vol. 44, no. 3, pp. 157-168, Sep. 1999, doi: 10.1111/j.1834-7819.1999.tb00217.x.

[50]

H. J. Conrad, W.-J. Seong, and I. J. Pesun, 'Current ceramic materials and systems with clinical recommendations: A systematic review', The Journal of Prosthetic Dentistry, vol. 98, no. 5, pp. 389-404, Nov. 2007, doi: 10.1016/S0022-3913(07)60124-3.

[51]

K. J. Donly, M. E. Jensen, P. Triolo, and D. Chan, 'A clinical comparison of resin composite inlay and onlay posterior restorations and cast-gold restorations at 7 year ', Quintessence International, vol. 30, no. 3, pp. 163–168, 1999.

[52]

R. Giordano, 'Materials for chairside CAD/CAM-produced restorations ', Journal of the American Dental Association, vol. 137, no. 9 Supp 1, pp. S14–S21, 2006, doi: 10.14219/jada.archive.2006.0397.

[53]

M. Guazzato, M. Albakry, S. P. Ringer, and M. V. Swain, 'Strength, fracture toughness and microstructure of a selection of all-ceramic materials. Part II. Zirconia-based dental ceramics', Dental Materials, vol. 20, no. 5, pp. 449–456, Jun. 2004, doi: 10.1016/j.dental.2003.05.002.

[54]

F. Lutz and T. N. Göhring, 'Masters of Esthetic Dentistry.', Journal of Esthetic and Restorative Dentistry, vol. 12, no. 3, pp. 164–171, May 2000, doi: 10.1111/j.1708-8240.2000.tb00216.x.

[55]

N. Martin and N. M. Jedynakiewicz, 'Clinical performance of CEREC ceramic inlays: a systematic review', Dental Materials, vol. 15, no. 1, pp. 54–61, Jan. 1999, doi: 10.1016/S0109-5641(99)00014-7.

[56]

T. Otto and S. De Nisco, 'Computer--aided direct ceramic restorations: A 10-year prospective clinical study of cerec CAD/CAM inlays and onlays', The International Journal of Prosthodontics , vol. 15, no. 2, pp. 122–128, 2002.

[57]

W. Palin and F. Burke, 'Article', *Dental Update. Leading Dental Journal for CPD*, vol. 32, no. 10, pp. 566–572, 2005.

[58]

S. J. Sadowsky, 'An overview of treatment considerations for esthetic restorations: A review of the literature', *The Journal of Prosthetic Dentistry*, vol. 96, no. 6, pp. 433–442, Dec. 2006, doi: 10.1016/j.prosdent.2006.09.018.

[59]

Touati, Bernard, Miara, Paul, and Nathanson, Dan, *Esthetic dentistry and ceramic restorations*. London: Martin Dunitz, 1999.

[60]

Z. Ab-Ghani, H. Ngo, and J. McIntyre, 'Effect of remineralization/demineralization cycles on mineral profiles of Fuji IX Fast in vitro using electron probe microanalysis', *Australian Dental Journal*, vol. 52, no. 4, pp. 276–281, Dec. 2007, doi: 10.1111/j.1834-7819.2007.tb00502.x.

[61]

M. G. Botelho, 'Inhibitory Effects on Selected Oral Bacteria of Antibacterial Agents Incorporated in a Glass Ionomer Cement', *Caries Research*, vol. 37, no. 2, pp. 108–114, 2003, doi: 10.1159/000069019.

[62]

F. Burke, G. Fleming, F. Owen, and D. Watson, 'Materials for Restoration of Primary Teeth: 2. Glass Ionomer Derivatives and Compomers', *Dental Update. Leading Dental Journal for CPD*, vol. 29, no. 1, pp. 10–17, 2002.

[63]

B. M. Culbertson, 'New polymeric materials for use in glass-ionomer cements', *Journal of Dentistry*, vol. 34, no. 8, pp. 556–565, Sep. 2006, doi: 10.1016/j.jdent.2005.08.008.

[64]

R. A. M. Exterkate, J. J. M. Damen, and J. M. ten Cate, 'Effect of Fluoride-Releasing Filling Materials on Underlying Dentinal Lesions in vitro', *Caries Research*, vol. 39, no. 6, pp. 509–513, 2005, doi: 10.1159/000088188.

[65]

J. E. Frencken, F. Makoni, and W. D. Sithole, 'ART restorations and glass ionomer sealants in Zimbabwe: survival after 3 years', *Community Dentistry and Oral Epidemiology*, vol. 26, no. 6, pp. 372–381, Dec. 1998, doi: 10.1111/j.1600-0528.1998.tb01975.x.

[66]

J.-Y. Hu, Y.-Q. Li, R. J. Smales, and K. H.-K. Yip, 'Restoration of teeth with more-viscous glass ionomer cements following radiation-induced caries', *International Dental Journal*, vol. 52, no. 6, pp. 445–448, 2002, doi: 10.1111/j.1875-595X.2002.tb00640.x.

[67]

A. Kakaboura, G. Eliades, and G. Palaghias, 'An FTIR study on the setting mechanism of resin-modified glass ionomer restoratives', *Dental Materials*, vol. 12, no. 3, pp. 173–178, 1996, doi: 10.1016/S0109-5641(96)80017-0.

[68]

B. E. Kent, B. G. Lewis, and A. D. Wilson, 'The properties of a glass ionomer cement', *British Dental Journal*, vol. 135, no. 7, pp. 322–326, Oct. 1973.

[69]

N. Krämer and R. Frankenberger, 'Dental Materials: Clinical performance of a condensable metal-reinforced glass ionomer cement in primary molars', *British Dental Journal*, vol. 190, no. 6, pp. 317–321, Mar. 2001, doi: 10.1038/sj.bdj.4800960.

[70]

S.-Y. Lee, D.-R. Dong, H.-M. Huang, and Y.-H. Shih, 'Fluoride ion diffusion from a glass-ionomer cement', *Journal of Oral Rehabilitation*, vol. 27, no. 7, pp. 576–586, Jul.

2000, doi: 10.1046/j.1365-2842.2000.00554.x.

[71]

J. F. McCabe, 'Resin-modified glass-ionomers', *Biomaterials*, vol. 19, no. 6, pp. 521–527, Apr. 1998, doi: 10.1016/S0142-9612(98)00132-X.

[72]

A. Moshaverinia, S. Ansari, Z. Movasaghi, R. W. Billington, J. A. Darr, and I. U. Rehman, 'Modification of conventional glass-ionomer cements with N-vinylpyrrolidone containing polyacids, nano-hydroxy and fluoroapatite to improve mechanical properties', *Dental Materials*, vol. 24, no. 10, pp. 1381–1390, Oct. 2008, doi: 10.1016/j.dental.2008.03.008.

[73]

A. Moshaverinia, S. Ansari, M. Moshaverinia, N. Roohpour, J. A. Darr, and I. Rehman, 'Effects of incorporation of hydroxyapatite and fluoroapatite nanobioceramics into conventional glass ionomer cements (GIC)', *Acta Biomaterialia*, vol. 4, no. 2, pp. 432–440, Mar. 2008, doi: 10.1016/j.actbio.2007.07.011.

[74]

A. Moshaverinia et al., 'Effects of N-vinylpyrrolidone (NVP) containing polyelectrolytes on surface properties of conventional glass-ionomer cements (GIC)', *Dental Materials*, vol. 25, no. 10, pp. 1240–1247, Oct. 2009, doi: 10.1016/j.dental.2009.05.006.

[75]

A. MOSHAVERINIA, N. ROOHPOUR, and I. REHMAN, 'Synthesis and characterization of a novel fast-set proline-derivative-containing glass ionomer cement with enhanced mechanical properties', *Acta Biomaterialia*, vol. 5, no. 1, pp. 498–507, Jan. 2009, doi: 10.1016/j.actbio.2008.06.011.

[76]

K. Nakajo, S. Imazato, Y. Takahashi, W. Kiba, S. Ebisu, and N. Takahashi, 'Fluoride released from glass-ionomer cement is responsible to inhibit the acid production of caries-related

oral streptococci', *Dental Materials*, vol. 25, no. 6, pp. 703–708, Jun. 2009, doi: 10.1016/j.dental.2008.10.014.

[77]

M. Rothwell, H. M. Anstice, and G. J. Pearson, 'The uptake and release of fluoride by ion-leaching cements after exposure to toothpaste', *Journal of Dentistry*, vol. 26, no. 7, pp. 591–597, Sep. 1998, doi: 10.1016/S0300-5712(97)00035-3.

[78]

S. K. Sidhu and T. F. Watson, 'Resin-modified glass ionomer materials. A status report for the American Journal of Dentistry.', *American journal of dentistry*, vol. 8, no. 1, pp. 59–67, 1995.

[79]

I. C. B. Small, T. F. Watson, A. V. Chadwick, and S. K. Sidhu, 'Water sorption in resin-modified glass-ionomer cements: An in vitro comparison with other materials', *Biomaterials*, vol. 19, no. 6, pp. 545–550, Apr. 1998, doi: 10.1016/S0142-9612(97)00135-X.

[80]

D. C. Smith, 'Development of glass-ionomer cement systems', *Biomaterials*, vol. 19, no. 6, pp. 467–478, Apr. 1998, doi: 10.1016/S0142-9612(97)00126-9.

[81]

Y. TAKAHASHI, S. IMAZATO, A. KANESHIRO, S. EBISU, J. FRENCKEN, and F. TAY, 'Antibacterial effects and physical properties of glass-ionomer cements containing chlorhexidine for the ART approach', *Dental Materials*, vol. 22, no. 7, pp. 647–652, Jul. 2006, doi: 10.1016/j.dental.2005.08.003.

[82]

W. M. Tay and M. Braden, 'Fluoride ion diffusion from polyalkenoate (glass-ionomer) cements', *Biomaterials*, vol. 9, no. 5, pp. 454–456, Sep. 1988, doi: 10.1016/0142-9612(88)90012-9.

[83]

L. S. TÜRKÜN, M. TÜRKÜN, F. ERTUGRUL, M. ATES, , and S. BRUGGER, 'Long-Term Antibacterial Effects and Physical Properties of a Chlorhexidine-Containing Glass Ionomer Cement', *Journal of Esthetic and Restorative Dentistry*, vol. 20, no. 1, pp. 29–44, Feb. 2008, doi: 10.1111/j.1708-8240.2008.00146.x.

[84]

M. J. Tyas , 'Clinical studies related to glass ionomers', *Operative dentistry*, no. Supp 5, pp. 191–198, 1992.

[85]

A. Wiegand, W. Buchalla, and T. Attin, 'Review on fluoride-releasing restorative materials—Fluoride release and uptake characteristics, antibacterial activity and influence on caries formation', *Dental Materials*, vol. 23, no. 3, pp. 343–362, Mar. 2007, doi: 10.1016/j.dental.2006.01.022.

[86]

D. Xie, W. A. Brantley, B. M. Culbertson, and G. Wang, 'Mechanical properties and microstructures of glass-ionomer cements', *Dental Materials*, vol. 16, no. 2, pp. 129–138, Mar. 2000, doi: 10.1016/S0109-5641(99)00093-7.

[87]

X. Xu and J. O. Burgess, 'Compressive strength, fluoride release and recharge of fluoride-releasing materials', *Biomaterials*, vol. 24, no. 14, pp. 2451–2461, Jun. 2003, doi: 10.1016/S0142-9612(02)00638-5.

[88]

A. U. J. Yap, Y. S. Pek, and P. Cheang, 'Physico-mechanical properties of a fast-set highly viscous GIC restorative', *Journal of Oral Rehabilitation*, vol. 30, no. 1, pp. 1–8, Jan. 2003, doi: 10.1046/j.1365-2842.2003.01006.x.

[89]

A. Young, 'FTIR investigation of monomer polymerisation and polyacid neutralisation kinetics and mechanisms in various aesthetic dental restorative materials', *Biomaterials*, vol. 25, no. 5, pp. 823–833, Feb. 2004, doi: 10.1016/S0142-9612(03)00599-4.

[90]

H. B. M. Akerboom, J. G. A. Advokaat, W. E. Amerongen, and P. J. Borgmeijer, 'Long-term evaluation and rerestoration of amalgam restorations', *Community Dentistry and Oral Epidemiology*, vol. 21, no. 1, pp. 45–48, Feb. 1993, doi: 10.1111/j.1600-0528.1993.tb00718.x.

[91]

C. J. Collins and R. W. Bryant, 'Finishing of amalgam restorations: a three-year clinical study', *Journal of Dentistry*, vol. 20, no. 4, pp. 202–206, Aug. 1992, doi: 10.1016/0300-5712(92)90074-M.

[92]

G. Schmalz, 'Use of cell cultures for toxicity testing of dental materials—advantages and limitations', *Journal of Dentistry*, vol. 22, pp. S6–S11, Jan. 1994, doi: 10.1016/0300-5712(94)90032-9.

[93]

K. Sune Larsson, 'Screening tests for systemic effects of dental materials', *Journal of Dentistry*, vol. 22, pp. S12–S15, Jan. 1994, doi: 10.1016/0300-5712(94)90033-7.

[94]

G. Warfvinge, 'Screening tests for sensitization potential of dental materials', *Journal of Dentistry*, vol. 22, pp. S16–S20, Jan. 1994, doi: 10.1016/0300-5712(94)90034-5.

[95]

R. M. Browne, 'Animal tests for biocompatibility of dental materials—relevance, advantages and limitations', *Journal of Dentistry*, vol. 22, pp. S21–S24, Jan. 1994, doi:

10.1016/0300-5712(94)90035-3.

[96]

M. Goldberg, J. J. Lasfargues, and J. M. Legrand, 'Clinical testing of dental materials—histological considerations', *Journal of Dentistry*, vol. 22, pp. S25–S28, Jan. 1994, doi: 10.1016/0300-5712(94)90036-1.

[97]

P. Hörsted-Bindslev, 'Clinical testing of dental materials— general clinical aspects', *Journal of Dentistry*, vol. 22, pp. S29–S32, Jan. 1994, doi: 10.1016/0300-5712(94)90037-X.

[98]

B. M. Eley, 'The future of dental amalgam: a review of the literature. Part 1: Dental amalgam structure and corrosion', *British Dental Journal*, vol. 182, no. 7, pp. 247–249, Apr. 1997 [Online]. Available:  
<https://contentstore.cla.co.uk/secure/link?id=6bde52ce-e26f-e811-80cd-005056af4099>

[99]

B. M. Eley, 'The future of dental amalgam: a review of the literature. Part 2: Mercury exposure in dental practice', *British Dental Journal*, vol. 182, no. 8, pp. 293–297, Apr. 1997 [Online]. Available:  
<https://contentstore.cla.co.uk/secure/link?id=0b90535a-e06f-e811-80cd-005056af4099>

[100]

B. M. Eley, 'The future of dental amalgam: a review of the literature. Part 3: Mercury exposure from amalgam restorations in dental patients', *British Dental Journal*, vol. 182, no. 9, pp. 333–338, May 1997 [Online]. Available:  
<https://contentstore.cla.co.uk/secure/link?id=bc870e94-b470-e811-80cd-005056af4099>

[101]

B. M. Eley, 'The future of dental amalgam: a review of the literature. Part 4: Mercury exposure hazards and risk assessment', *British Dental Journal*, vol. 182, no. 10, pp. 373–381, May 1997, doi: 10.1038/sj.bdj.4809393.

[102]

B. M. Eley, 'The future of dental amalgam: a review of the literature. Part 5: Mercury in the urine, blood and body organs from amalgam fillings', *British Dental Journal*, vol. 182, no. 11, pp. 413–417, Jun. 1997.

[103]

B. M. Eley, 'The future of dental amalgam: a review of the literature. Part 6: Possible harmful effects of mercury from dental amalgam', *British Dental Journal*, vol. 182, no. 12, pp. 455–459, Jun. 1997 [Online]. Available:  
<https://contentstore.cla.co.uk/secure/link?id=5bcaeea4-b370-e811-80cd-005056af4099>

[104]

B. M. Eley, 'The future of dental amalgam: a review of the literature. Part 7: Possible alternative materials to amalgam for the restoration of posterior teeth', *British Dental Journal*, vol. 183, no. 1, pp. 11–14, Jul. 1997 [Online]. Available:  
<https://contentstore.cla.co.uk/secure/link?id=36aac76f-b370-e811-80cd-005056af4099>

[105]

K. A. Ritchie et al., 'Mercury vapour levels in dental practices and body mercury levels of dentists and controls', *British Dental Journal*, vol. 197, no. 10, pp. 625–632, Nov. 2004, doi: 10.1038/sj.bdj.4811831.

[106]

R. J. M. Gruythuysen, C. M. Kreulen, H. Tobi, E. Amerongen, and H. B. M. Akerboom, '15-year evaluation of Class II amalgam restorations', *Community Dentistry and Oral Epidemiology*, vol. 24, no. 3, pp. 207–210, Jun. 1996, doi: 10.1111/j.1600-0528.1996.tb00843.x.

[107]

D. W. Jones, 'The enigma of amalgam in dentistry.', *Journal of the Canadian Dental Association*, vol. 59, no. 2, pp. 155–166, 1993.

[108]

D. W. Jones, 'Has Dental Amalgam Been Torpedoed and Sunk?', *Journal of Dental Research*, vol. 87, no. 2, pp. 101–102, Feb. 2008, doi: 10.1177/154405910808700203.

[109]

J. Osborne, 'Amalgam: dead or alive?', *Dental Update. Leading Dental Journal for CPD*, vol. 33, no. 2, pp. 94–98, 2008.

[110]

M. Wahl , 'Dental materials: A Resin Alternative for Posterior Teeth:Questions and Answers on Dental Amalgam', *Dental Update. Leading Dental Journal for CPD*, vol. 30, no. 5, pp. 256–262, 2003.

[111]

P. Sfikas, 'Can a dentist ethically remove serviceable amalgam restorations?', *Journal of the American Dental Association*, vol. 127, no. 5, pp. 685–687, 1996, doi: 10.14219/jada.archive.1996.0282.

[112]

J. C. Wataha, 'Principles of biocompatibility for dental practitioners', *The Journal of Prosthetic Dentistry*, vol. 86, no. 2, pp. 203–209, Aug. 2001, doi: 10.1067/mpd.2001.117056.

[113]

G. L. Adabo, E. Zanarotti, R. G. Fonseca, and C. A. dos S. Cruz, 'Effect of disinfectant agents on dimensional stability of elastomeric impression materials', *The Journal of Prosthetic Dentistry*, vol. 81, no. 5, pp. 621–624, May 1999, doi: 10.1016/S0022-3913(99)70219-2.

[114]

U. S. Beier, I. Grunert, S. Kulmer, and H. Dumfahrt, 'Quality of impressions using hydrophilic polyvinyl siloxane in a clinical study of 249 patients', *The International Journal*

of Prosthodontics , vol. 20, no. 3, pp. 270-274, 2007.

[115]

D. Brown, 'Materials for impressions', *Dental Update. Leading Dental Journal for CPD*, vol. 31, no. 1, pp. 40-45, 2004.

[116]

J. A. Ceyhan, G. H. Johnson, and X. Lepe, 'The effect of tray selection, viscosity of impression material, and sequence of pour on the accuracy of dies made from dual-arch impressions', *The Journal of Prosthetic Dentistry*, vol. 90, no. 2, pp. 143-149, Aug. 2003, doi: 10.1016/S0022-3913(03)00276-2.

[117]

S. O. Hondrum, 'Changes in properties of nonaqueous elastomeric impression materials after storage of components', *The Journal of Prosthetic Dentistry*, vol. 85, no. 1, pp. 73-81, Jan. 2001, doi: 10.1067/mpr.2001.112407.

[118]

G. H. Johnson, X. Lepe, and T. C. Aw, 'The effect of surface moisture on detail reproduction of elastomeric impressions', *The Journal of Prosthetic Dentistry*, vol. 90, no. 4, pp. 354-364, Oct. 2003, doi: 10.1016/S0022-3913(03)00429-3.

[119]

B. J. Millar, S. M. Dunne, and P. B. Robinson, 'The effect of a surface wetting agent on void formation in impressions', *The Journal of Prosthetic Dentistry*, vol. 77, no. 1, pp. 54-56, Jan. 1997, doi: 10.1016/S0022-3913(97)70207-5.

[120]

J. Nissan, B.-Z. Laufer, T. Brosh, and D. Assif, 'Accuracy of three polyvinyl siloxane putty-wash impression techniques', *The Journal of Prosthetic Dentistry*, vol. 83, no. 2, pp. 161-165, Feb. 2000, doi: 10.1016/S0022-3913(00)80007-4.

[121]

C. P. K. Wadhwani, G. H. Johnson, X. Lepe, and A. J. Raigrodski, 'Accuracy of newly formulated fast-setting elastomeric impression materials', *The Journal of Prosthetic Dentistry*, vol. 93, no. 6, pp. 530–539, Jun. 2005, doi: 10.1016/j.jprosdent.2005.03.007.

[122]

J. Chai, Y. Takahashi, and E. P. Lautenschlager , 'Clinically relevant mechanical properties of elastomeric impression materials', *The International Journal of Prosthodontics* , vol. 11, no. 3, pp. 219-223, 1998.

[123]

D. Frederick and A. Caputo, 'Comparing the accuracy of reversible hydrocolloid and elastomeric impression materials', *Journal of the American Dental Association*, vol. 128, no. 2, pp. 183-188, 1997, doi: 10.14219/jada.archive.1997.0162.

[124]

G. Christensen, 'Laboratories want better impressions', *Journal of the American Dental Association*, vol. 138, no. 4, pp. 527-529, 2007, doi: 10.14219/jada.archive.2007.0207.

[125]

A. McCullagh, C. Sweet, and M. Ashley, 'Making a Good Impression (A "How to" Paper on Dental Alginate) ', *Dental Update. Leading Dental Journal for CPD*, vol. 32, no. 3, pp. 169-175, 2005.

[126]

D. A. Stewardson, 'Trends in Indirect Dentistry: 5. Impression Materials and Techniques', *Dental Update. Leading Dental Journal for CPD*, vol. 32, no. 7, pp. 374-393, 2005.

[127]

T. E. Donovan and W. W. Chee, 'A review of contemporary impression materials and techniques', *The dental clinics of North America*, vol. 48, no. 2, pp. 445-470, 2004.

[128]

J. E. Martinez, E. C. Combe, and I. J. Pesun, 'Rheological properties of vinyl polysiloxane impression pastes', *Dental Materials*, vol. 17, no. 6, pp. 471–476, Nov. 2001, doi: 10.1016/S0109-5641(00)00100-7.

[129]

R. L. Taylor, P. S. Wright, and C. Maryan, 'Disinfection procedures: their effect on the dimensional accuracy and surface quality of irreversible hydrocolloid impression materials and gypsum casts', *Dental Materials*, vol. 18, no. 2, pp. 103–110, Mar. 2002, doi: 10.1016/S0109-5641(01)00027-6.

[130]

M. Pamenius and N. G. Ohlson, 'Influence of dimensional stability of impression materials on the probability of acceptance of a prosthetic restoration', *Biomaterials*, vol. 16, no. 15, pp. 1193–1197, Oct. 1995, doi: 10.1016/0142-9612(95)93586-3.

[131]

M. P. Walker, M. Rondeau, C. Petrie, A. Tasca, and K. Williams, 'Surface Quality and Long-term Dimensional Stability of Current Elastomeric Impression Materials after Disinfection', *Journal of Prosthodontics*, vol. 16, no. 5, pp. 343–351, Sep. 2007, doi: 10.1111/j.1532-849X.2007.00206.x.

[132]

R. Giordano, 'Impression materials: basic properties.', *General dentistry*, vol. 48, no. 5, pp. 510–516, 2000 [Online]. Available: <https://contentstore.cla.co.uk/secure/link?id=fdd2082b-0773-e811-80cd-005056af4099>

[133]

M. Kanehira, W. Finger, and Masashi Komatsu, 'Surface detail reproduction with new elastomeric dental impression materials ', *Quintessence International*, vol. 38, no. 6, pp. 479–488, 2007.

[134]

D. C. Jagger and et.al., 'The effect of a range of disinfectants on the dimensional accuracy and stability of some impression materials.', *Journal of prosthodontics and restorative dentistry*, vol. 15, no. 1, pp. 23-28, 2007.

[135]

W. Chee and S. Jivraj, 'Impression techniques for implant dentistry', *British Dental Journal*, vol. 201, no. 7, pp. 429-432, Oct. 2006, doi: 10.1038/sj.bdj.4814118.

[136]

R. W. Wassell, D. Barker, and A. W. G. Walls, 'Crowns and other extra-coronal restorations: Impression materials and technique', *British Dental Journal*, vol. 192, no. 12, pp. 679-690, Jun. 2002, doi: 10.1038/sj.bdj.4801456.

[137]

D. Brown, 'Article', *Dental Update. Leading Dental Journal for CPD*, vol. 32, no. 10, pp. 583-586, 2005.

[138]

P. Carrotte, 'Endodontics: Part 7 Preparing the root canal', *British Dental Journal*, vol. 197, no. 10, pp. 603-613, Nov. 2004, doi: 10.1038/sj.bdj.4811823.

[139]

J. Noble, S. I. Ahing, N. E. Karaiskos, and W. A. Wiltshire, 'Nickel allergy and orthodontics, a review and report of two cases', *BDJ*, vol. 204, no. 6, pp. 297-300, Mar. 2008, doi: 10.1038/bdj.2008.198.

[140]

A. Scott et al., 'The national survey of adverse reactions to dental materials in the UK: a preliminary study by the UK Adverse Reactions Reporting Project', *British Dental Journal*, vol. 196, no. 8, pp. 471-477, Apr. 2004, doi: 10.1038/sj.bdj.4811176.

[141]

R. W. Wassell, A. W. G. Walls, and J. G. Steele, 'Crowns and extra-coronal restorations: Materials selection', British Dental Journal, vol. 192, no. 4, pp. 199–211, Feb. 2002, doi: 10.1038/sj.bdj.4801334.

[142]

A. W. G. Walls, F. S. A. Nohl, and R. W. Wassell, 'Crowns and other extra-coronal restorations: Resin-bonded metal restorations', British Dental Journal, vol. 193, no. 3, pp. 135–142, Aug. 2002, doi: 10.1038/sj.bdj.4801506.

[143]

E. Schäfer and R. Lau, 'Comparison of cutting efficiency and instrumentation of curved canals with nickel-titanium and stainless-steel instruments', Journal of Endodontics, vol. 25, no. 6, pp. 427–430, Jun. 1999, doi: 10.1016/S0099-2399(99)80272-6.

[144]

S. A. Thompson, 'An overview of nickel-titanium alloys used in dentistry', International Endodontic Journal, vol. 33, no. 4, pp. 297–310, Jul. 2000, doi: 10.1046/j.1365-2591.2000.00339.x.

[145]

W. Wiltshire, M. Ferreira, and A. Ligthelm, 'Article', Quintessence International, vol. 27, no. 8, pp. 513–520, 1996 [Online]. Available: [http://www.quintpub.com/journals/qi/abstract.php?iss2\\_id=474&article\\_id=5776&article=2&title>Allergies to dental materials](http://www.quintpub.com/journals/qi/abstract.php?iss2_id=474&article_id=5776&article=2&title>Allergies to dental materials)

[146]

J. C. Wataha and C. T. Hanks, 'Biological effects of palladium and risk of using palladium in dental casting alloys', Journal of Oral Rehabilitation, vol. 23, no. 5, pp. 309–320, 1996, doi: 10.1111/j.1365-2842.1996.tb00858.x.

[147]

J. F. McCabe and A. Walls, Applied dental materials, 9th ed. Chichester: John Wiley & Sons, 2008 [Online]. Available: <https://www.123library.org/ebook/id/3663>

[148]

P. I. Branemark, U. Breine, R. Adell, O. Hansson, J. Lindstrom, and A. Ahlsson, 'Intra-Osseous Anchorage of Dental Prostheses:I. Experimental Studies, Scandinavian Journal of Plastic and Reconstructive Surgery and Hand Surgery, Informa Healthcare', Scandinavian Journal of Plastic and Reconstructive Surgery and Hand Surgery, vol. 3, no. 2, pp. 81-100, 1969, doi: 9036699.