

DAFTAR PUSTAKA

- Abdelaziz, A., dan Abdou, A. (2023). *Effect Of Preheating of Bulk-Fill Resin Dental Composite on Polymerization Shrinkage Strain. Egyptian Dental Journal*, 69(4), 3273–3280.
- Alfakhri, K. H., Aldosari, R. S., Alturki, I. B., dan Alhussain, B. S. (2021). *Resin-alf Sealants vs. Glass Ionomer Sealant: A Systematic Review to Determine the Clinical*. 1–5.
- Alhabdan, A. A. (2017). *Review Of Microleakage Evaluation Tools*. 9(4), 141–145.
- Altaf, G., Garg, S., Saraf, B. G., Sheoran, N., Beg, A., dan Anand, M. (2019). *Clinical Study of Pit and Fissure Morphology and Its Relationship with Caries Prevalence In Young Permanent First Molars*. 2(2), 56–60.
- Amend, S., Boutsiouki, C., Winter, J., Kloukos, D., Frankenberger, R., dan Krämer, N. (2024). *Clinical Effectiveness of Pit and Fissure Sealants in Primary and Permanent Teeth of Children and Adolescents: An Umbrella Review. European Archives of Paediatric Dentistry*, 25(3), 289–315.
- Andrzejewska, E., Andrzejewski, M., Socha, E., dan Zych-Tomkowiak, D. (2003). *Effect of polyacid aqueous solutions on photocuring of polymerizable components of resin-modified glass ionomer cements. Dental Materials*, 19(6), 501–509.
- Arora, D., Prabakar, J., Jeevanandan, G., dan Shanmugam, R. (2024). *Confocal Assessment of Microleakage of Hydrophilic Sealants and Flowable Composites. Journal of Pioneering Medical Sciences*, 13(7), 20–24.
- Bahari, M., Ajami, A. A., Chaharom, M. E. E., Kahnamouei, M. A., Katebi, K., dan Aghazadeh, A. (2024). *Pre-Heating Decreases Micro-Leakage of Bulk Fill Composite Resins in Dentin Margins of Class II Cavities: An In-Vitro Study. Journal Of Stomatology*, 77(2), 71–76.
- Baroudi, K., dan Rodrigues, J. C. (2015). *Flowable Resin Composites: A Systematic Review and Clinical Considerations. June*, 9(6), 18-24.
- Batista, J. M. N., Sinhoreti, M. A. C., Alves Fraga, M. A., Manoel Da Silva, M. V., Correr, A. B., Roulet, J.-F., dan Geraldeli, S. (2023). *Effect Of Preheating On Mechanical Properties Of A Resin-Based Composite Containing Elastomeric Urethane Monomer. Journal Of The Mechanical Behavior Of Biomedical Materials*, 141(6), 1–3.
- Bhopatkar, J., Ikhar, A., Chandak, M., Mankar, N., dan Sedani, S. (2022). *Composite Pre-Heating: A Novel Approach In Restorative Dentistry*. 14(7), 8–15.

- Butail, A., Dua, P., Mangla, R., Saini, S., Chauhan, A., dan Rana, S. (2020). *Evaluation of Marginal Microleakage and Depth of Penetration of Different Materials Used as Pit and Fissure Sealants : An In Vitro Study. International Journal of Clinical Pediatric Dentistry, 13(1), 3–7.*
- Chimie, R. R. De, Gong, H., Zhang, X., Guo, X., Gao, P., Zhao, Q., dan Xu, T. (2019). *Advances In Reducing Microleakage in Dental Composites, 64(6), 519-527.*
- Cho, K., Rajan, G., Farrar, P., Prentice, L., dan Prusty, B. G. (2022). *Dental Resin Composites: A Review on Materials To Product Realizations. Composites Part B: Engineering, 230(15), 10-19.*
- David, C., Cardoso de Cardoso, G., Isolan, C. P., Piva, E., Moraes, R. R., dan Cuevas-Suarez, C. E. (2022). *Bond strength of self-adhesive flowable composite resins to dental tissues: A systematic review and meta-analysis of in vitro studies. Journal of Prosthetic Dentistry, 128(5), 876–885.*
- Delgado, A. H. S., Alves, M., Pires, I., Nunes Ferreira, M., dan Cuevas-Suárez, C. E. (2025). *Self-Adhesive Flowable Resin Composites—Are We Going Somewhere? Journal Of Esthetic And Restorative Dentistry, 17(3), 1–20.*
- Dionysopoulos, D., dan Gerasimidou, O. (2021). *Wear Of Contemporary Dental Composite Resin Restorations: A Literature Review. Restorative Dentistry dan Endodontics, 46(2), 1–13.*
- Elraggal, A., Raheem, I. A., Holiel, A., Alhotan, A., Alshabib, A., Silikas, N., Watts, D. C., Alharbi, N., dan Afifi, R. R. (2024). *Bond Strength, Microleakage, Microgaps, And Marginal Adaptation Of Self-Adhesive Resin Composites To Tooth Substrates With And Without Preconditioning With Universal Adhesives. The Journal Of Adhesive Dentistry, 26(11), 53–64.*
- Fontana, M., Gonzalez-Cabezas, C., dan Tenuta, L. M. A. (2024). *Evidence-Based Approaches And Considerations For Nonrestorative Treatments Within Modern Caries Management: Integrating Science Into Practice. Journal Of The American Dental Association, 155(12), 1000–1011.*
- Garg, N., dan Garg, A. (2020). *Textbook Of Operative Dentistry. In Educacao E Sociedade (4th Ed., Vol. 1, Issue 1).*
- Gerceker, F. O., Akgul, H., dan Selamoglu, Z. (2023). *International Studies In Health Science. (1st Ed., Vol. 1, Issue 1), 201–203.*
- Hamouda, M. E., Harp, Y. S., dan Elembaby, A. E. (2025). *Evaluation Of Microleakage And Micromorphological Analysis Of Different Self-Adhesive Restorative Systems In Class V Cavities: Laboratory Study. Journal Of Clinical And Experimental Dentistry, 17(7), 805–815.*
- Hanafy, M. A., Fahmy, O. M., dan Elezz, A. F. A. (2024). *Effect Of Preheating Of Resin Composite On Microtensile Bond Strength In Vitro Study. 12(1), 102–106.*

- Hosseini-pour, Z. S., Heidari, A., Shahrabi, M., dan Poorzandpoush, K. (2019). *Microleakage Of A Self-Adhesive Flowable Composite, A Self-Adhesive Fissure Sealant And A Conventional Fissure Sealant In Permanent Teeth With/Without Saliva Contamination. Frontiers In Dentistry, 16(4), 239–247.*
- Jacob, G., dan Goud, K. M. (2023). *A Comparative Study On Microleakage Of Two Low Shrinkage Composite Materials In Class Ii Cavities: A Stereomicroscopic Analysis. 26(1), 83–87.*
- Jafari, F., dan Jafari, S. (2017). *Importance And Methodologies Of Endodontic Microleakage Studies: A Systematic Review. Journal Of Clinical And Experimental Dentistry, 9(6), 812–819.*
- Je, W., dan Ardinansyah, A. (2019). Perbedaan Efektifitas Retensi Dan Preventif Karies Bahan Pit Dan Fissure. *Odonto Dental Journal, 6(2), 125–133.*
- Jeconias, N., Fischer, P., dan Tauböck, T. T. (2025). *Viscosity-Dependent Shrinkage Behavior of Flowable Resin Composites. Polymers, 17(24), 1–12.*
- Juntavee, A., Juntavee, N., Chaisuntitrakoon, A., Millstein, P. L., dan Abedian, B. (2023). *Microleakage And Penetration Capability Of Various Pit And Fissure Sealants Upon Different Sealant Application Techniques. Journal Of Clinical And Experimental Dentistry, 15(10), 810–820.*
- Kamath, V., Hebbal, M., Ankola, A., Sankeshwari, R., Jalihal, S., Choudhury, A., Soliman, M., dan Eldwakhly, E. (2022). *Comparison Of Retention Between Conventional And Nanofilled Resin Sealants In A Paediatric Population: A Randomized Clinical Trial. Journal Of Clinical Medicine, 11(12), 1–10.*
- Kemaloglu, H., Cay, O., Ercan Devrimci, E., dan Pamir, T. (2024). *Repair Bond Strength Of A New Self-Adhesive Composite Resin To Three Different Resin-Matrix Ceramic Cad-Cam Materials. Dental Materials Journal, 43(2), 137–145.*
- Keya, K. N., Li, Z., Xu, L., dan Xia, W. (2025). *Exploring Cross-Link Density And Additive Effects On Mechanical And Morphological Behaviors Of Cross-Linked Polymers. Macromolecular Materials And Engineering, 310(5), 1–12.*
- Koruyucu, M., dan Aydinoglu, C. (2020). *Clinical Success Rate Of Fissure Sealants : One-Year Follow-Up *. 54(3), 109–113.*
- Kotecha, N., Shah, N. C., Gandhi, N. N., Porwal, P., Arora, S., dan Isaqali, M. (2024). *Heliyon Evaluation Of Pre-Heated Composite Resins With Soft-Start Polymerization And Conventional Composite Restorations In Class-I Carious Lesions – A Randomized Clinical Trial. Heliyon, 10(10), 1-10.*
- Lam, P. P. Y., Sardana, D., Ekambaram, M., Lee, G. H. M., dan Yiu, C. K. Y. (2020). *Effectiveness Of Pit And Fissure Sealants For Preventing And Arresting Occlusal Caries In Primary Molars: A Systematic Review And Meta-Analysis. Journal Of Evidence-Based Dental Practice, 20(2), 1-22.*

- Langalia, A., Buch, A., Khamar, M., dan Patel, P. (2015). *Polymerization Shrinkage Of Composite Resins: A Review. Quest Journals Journal Of Medical And Dental Science Research*, 2(10), 23-27.
- Leite, K. L. D. E. F., Rodrigues, G. F., Chevitarese, A. N. A. B., Magno, M. B., Maranon-Vasquez, G. A., Pintor, A. V. A. Z. B., Maia, dan Maia, L. C. (2024). *Are Pit And Fissure Sealants Effective In Preventing And Arresting Occlusal Caries In Primary And Permanent Teeth? An Overview Of Systematic Reviews. Journal Of Evidence-Based Dental Practice*, 24(3), 102-110.
- Li, H., Huang, Y., Zhou, X., Zhu, C., Han, Q., Wang, H., Xu, H. H. K., Ren, B., dan Cheng, L. (2021). *Intelligent Ph-Responsive Dental Sealants To Prevent Long-Term Microleakage. Dental Materials*, 37(10), 1529–1541.
- Liu, W., Xiong, L., Li, J., Guo, C., Fan, W., dan Huang, S. (2019). *The Anticaries Effects Of Pit And Fissure Sealant In The First Permanent Molars Of School-Age Children From Guangzhou: A Population-Based Cohort Study. BMC Oral Health*, 19(1), 1–8.
- Liu, X., Zhang, R., Yu, X., Hua, F., Zhang, L., dan Chen, Z. (2023). *Self-Adhesive Flowable Composite Resins And Flowable Composite Resins In Permanent Teeth With Occlusal Cavities: A Systematic Review And Meta-Analysis. Journal Of Dentistry*, 138(5), 104–106.
- Muntean, A., Simu, M. R., Suhani, R., dan Mesaros, A. S. (2019). *Pit And Fissure Sealants Penetration Capacity And Their Correlation With Fissure Morphology. Medicine And Pharmacy Reports*, 92(3), 50–54.
- Nam, S. M., Ku, H. M., Lee, E. S., dan Kim, B. Il. (2024). *Detection Of Pit And Fissure Sealant Microleakage Using Quantitative Light-Induced Fluorescence Technology: An In Vitro Study. Scientific Reports*, 14(1), 1–9.
- Nascimento Batista, J. M., Sinhoreti, M. A. C., Alves Fraga, M. A., Manoel Da Silva, M. V., Correr, A. B., Roulet, J.-F., dan Geraldeli, S. (2023). *Effect Of Preheating On Mechanical Properties Of A Resin-Based Composite Containing Elastomeric Urethane Monomer. Journal Of The Mechanical Behavior Of Biomedical Materials*, 141(6), 1-3.
- Nikolaos-Stefanos, K. (2018). *Resin Composite Pre-Heating - A Literature Review Of The Laboratory Results. International Journal Of Oral And Dental Health*, 4(2), 1–5.
- Omrani, L. R., Abbasi, M., Motevasselian, F., Yektaei, M. A., dan Najafi, F. (2020). *Degree Of Conversion And Water Sorption Of Self-Adhesive And Conventional Flowablecomposites: An In Vitro Study. Brazilian Journal Of Oral Sciences*, 19(5), 1–10.

- Oskoe, P. A., Oskoe, S. S., Pournaghi-Azar, F., Dibazar, S., dan Esmaeili, M. (2022). *Pre-Heating Of Low-Shrinkage Composite Resins: Effects On Color Stability And Surface Roughness. Frontiers In Dentistry*, 19(26), 1–7.
- Poubel, D. L. D. N., Da Silva, R. C., Ribeiro, A. P. D., dan Garcia, F. C. P. (2024). *Effect Of Preheating On The Viscosity Of Composite Resins. Journal Of Conservative Dentistry And Endodontics*, 27(4), 360–365.
- Powers, J. M., Wataha, J. C., dan Chen, Y.-W. (2017). *Dental Material Foundations And Applications* (11th Ed.).
- Prabahar, T., Chowdhary, N., Konkappa, K. N., Vundela, R. R., dan Balamurugan, S. (2022). *Evaluation Of Microleakage Of Different Types Of Pit And Fissure Sealants: An In Vitro Comparative Study. International Journal Of Clinical Pediatric Dentistry*, 15(5), 535–540.
- Rushworth, B., dan Kanatas, A. (2020). *Oxford Handbook Of Clinical Dentistry* (7th Ed.).
- Ronald, S., Jack, F., dan John, P. (2019). *Craig's Restorative Dental Materials: Restorative Materials: Resin Composites And Polymers* (Fourteenth). Elsevier Inc. Saveanu, C. I., Sestac, A., Anistoroaei, D., Saveanu, A. E., Trandafirescu, M. F., Saveanu, M. S., dan Golovcencu, L. (2025). *In Vitro Microleakage Comparison Of Three Pit-And-Fissure Sealant Protocols : Self-Etch Sealant With And Without Separate Adhesive Versus Conventional Resin-Based Sealants. 13(2092)*, 1–18.
- Sengar, E. V., Mulay, S., Beri, L., Gupta, A., Almohareb, T., Binalrimal, S., Robaian, A., Bahammam, M. A., Bahammam, H. A., Bahammam, S. A., Zidane, B., Albar, N. H., Bhandi, S., Shrivastava, D., Srivastava, K. C., dan Patil, S. (2022). *Comparative Evaluation Of Microleakage Of Flowable Composite Resin Using Etch And Rinse, Self-Etch Adhesive Systems, And Self-Adhesive Flowable Composite Resin In Class V Cavities: Confocal Laser Microscopic Study. Materials*, 15(14), 1–11.
- Shakfeh, L., Kabbesh, K., dan Alfares, R. (2023). *Marginal Microleakage Of Self-Adhesive Flowable Composite As A Pit-Fissure Sealants Upon Different Application Techniques: A Comparative In-Vitro Study. Biomedical Science And Clinical Research*, 3(1), 01–07.
- Shen, C., Rawls, R., dan Upshaw, F. E. (2022). *Phillips' Science Of Dental Materials* (13th Ed.).
- Shih, W. Y. (2016). *Microleakage In Different Primary Tooth Restorations. Journal Of The Chinese Medical Association*, 79(4), 228–234.
- Shono, N. N., dan Alkhudhairy, F. (2025). *Evaluation Of Microleakage, Tensile Bond Strength, And Adhesive Interface Of Bulk Fill,Ormocer, And Alkasite Against*

- Conventional Composite In Caries-Affected Primary Molars. Coatings, 15(3), 1-10.*
- Singh, C., Kaur, K., dan Kapoor, K. (2019). *Retention of pit and fissure sealant versus flowable composite: An in vivo one-year comparative evaluation. Journal of Indian Society of Pedodontics and Preventive Dentistry, 37(4), 372–377.*
- Simsek Derelioglu, S., Yilmaz, Y., Celik, P., Carikcioglu, B., dan Keles, S. (2014). *Bond Strength And Microleakage Of Self-Adhesive And Conventional Fissure Sealants. Dental Materials Journal, 33(4), 530–538.*
- Snigdha, N. T., dan Karobari, M. I. (2025). *Bacterial Leakage Testing in Dentistry: A Comprehensive Review on Methods, Models, and Clinical Relevance. Scientifica, 2025(1).*
- Survei Kesehatan Indonesia. (2023). *Dalam Angka Dalam Angka. SKI, 1(1), 1–68.*
- Sofiani, E., dan Rovi, F. (2020). *Pengaruh Lama Penyinaran Dan Ketebalan Resin Komposit Bulk Fill Terhadap Kebocoran Mikro. Insisiva Dental Journal : Majalah Kedokteran Gigi Insisiva, 9(2), 72–81.*
- Sousa, S. E. P., Da Costa, E. S., Borges, B. C. D., De Assunção, I. V., dan Dos Santos, A. J. S. (2015). *Staining Resistance Of Preheated Flowable Composites To Drinking Pigmented Beverages. Revista Portuguesa De Estomatologia, Medicina Dentaria E Cirurgia Maxilofacial, 56(4), 221–225.*
- Sreedevi, A., Brizuela, M., dan Mohamed, S. (2025). *Startpearl: Pit And Fissure Sealants.*
- Tanjung, S., Djuanda, R., dan Evelyn, A. (2019). *Perbedaan Kekuatan Geser Perlekatan (Shear Bond Strength) Antara Self – Adhering Flowable Composite Dan Flowable Composite Dengan Sistem Adhesif Self – Etch Pada Dentin. Sonde (Sound Of Dentistry), 4(1), 16–25.*
- Taşan, Ç. A., dan Ceran, F. (2024). *Pit And Fissure Sealants. Abcresearch, 6(3), 235–242.*
- Tayebghasemi, N. (2018). *Effect Of Composite Preheating On Microleakage Of Class V Restorations. Research Square, 5(2), 1–15.*
- Thadathil Varghese, J., Cho, K., Raju, Farrar, P., Prentice, L., dan Prusty, B. G. (2023). *Effect Of Silane Coupling Agent And Concentration On Fracture Toughness And Water Sorption Behaviour Of Fibre-Reinforced Dental Composites. Dental Materials, 39(4), 362–371.*
- Ummah, M. S. (2019). *Pedoman Nasional Pelayanan Klinis Tata Laksana Karies Gigi. Sustainability (Switzerland), 11(1), 1–14.*
- Hernández, L., Correa, Lowery, L., dan Ardila, C. M. (2024). *Effect Of Preheating And Curing Lamp Distance On The Degree Of Conversion Of Four Nanohybrid*

Resins: An In Vitro Study. Journal Of Clinical And Experimental Dentistry, 16(8), 975–983.

Venkataiah, V.S., dan Karobari, M. I. (2025). *Effectiveness Of Biofilm-Targeted Therapy In Managing And Preventing Dental Caries: Protocol For A Systematic Review And Meta-Analysis. Systematic Reviews, 14(1), 4–9.*

Wang, J. D., Chen, X., Frencken, J., Du, M. Q., dan Chen, Z. (2012). *Dental caries and first permanent molar pit and fissure morphology in 7- to 8-year-old children in Wuhan, China. International Journal of Oral Science, 4(3), 157–160.*

Warna, D., Fatmawati, A. (2015). *Jurnal Kedokteran Gigi Universitas Jember, Hubungan Biofilm. 8(3), 127-130.*

Wig, M., Kumar, A., Chaluvaiyah, M. B., Yadav, V., dan Mendiratta, M. (2021). *Pit And Fissure Sealants: A Review Of Systematic Reviews. Saudi Journal Of Oral And Dental Research. 6(5), 174–178.*

World Health Organization. (2022). *Global Oral Health Status Report. In Who (Vol. 57, Issue 2).*

Yadav, K., dan Prakash, S. (2016). *Dental Caries: A Review. Asian Journal Of Biomedical And Pharmaceutical Sciences. 6(53), 1-7.*

Yang, J. N. C., Raj, J. D., dan Sherlin, H. (2016). *Effects Of Preheated Composite On Micro Leakage-An In-Vitro Study. Journal Of Clinical And Diagnostic Research, 10(6), 36–38.*

Yasmin, U., Adityanti, S., Tami, D., Studi, P., Gigi, K., Kedokteran, F., Sriwijaya, U., Caries, F., dan Permanen, M. P. (2024). *Preventive Resin Restoration To Prevent Cavities In Permanent. Jurnal Kesehatan Gigi Dan Mulut, 6(1), 60–68.*

Zanatta, C. T. I., Cardoso, P. M. De F., Camilotti, V., Mendonça, M. J., dan Ueda, J. K. (2024). *Micro-Shear Bond Strength Of Self-Adhesive Versus Conventional Low-Viscosity Composite Resins: In Vitro Study. Journal Of Advances In Medicine And Medical Research, 36(4), 11–20.*