

The 10th Conference of Asian International Association of Dental Traumatology (10th AADT, Okayama)

– Call For Papers –

Organizing Chairman: Dr Masao Irie, Department of Biomaterials, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Science, Okayama, JAPAN

Organizing Vice-Chairman: Dr Norihiro Sonoi, Center for Education in Medicine and Health Sciences Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Science, Okayama, JAPAN

Organizing Secretary: Dr Hiroaki Taketa, Department of Comprehensive Dentistry, Division of Dentistry, Okayama University Hospital, Okayama, JAPAN

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Conference format: Held in the Magazine

ABSTRACT

Instruction

1. All presentation must be done in English (Font: Times New Roman, 12 points).
2. Size: A4
3. Title (Font: Times New Roman, 14 points, Bold), Name (e-mail of corresponding presenter), Affiliation and address, Your photo (about 3 X 4 cm), Abstract (maximum 300 words, Objective, Materials & Method, Results, Conclusion), Key words (3 – 5 words)
4. Brief CV (Educational background and Professional experience) Half-page
5. Contact to: Masao Irie, Okayama University
e-mail: 10aadtokayama@gmail.com
6. We are accepting your presentations, so we are looking forward to applying for a presentation
***Abstract submission deadline : Saturday, 26 December, 2022**

【For Example】

Highly-viscous glass-ionomer cement for filling: Interfacial Gap-formation in Class I restoration and Mechanical properties.



Dr. Masao Irie

Assistant Professor, Department of Biomaterials, Okayama
University Graduate School of Medicine, Dentistry and Pharmaceutical Science.
2-5-1 Shikata-cho, Kita-ku, Okayama, 700-8525, JAPAN
e-mail: mirie@md.okayama-u.ac.jp

Objects: One of the major concerns with highly-viscous glass ionomer cements (HV-GICs) is their ability to achieve effective initial interfacial gap-formation in restorative cavities. This *in vitro* study examined the initial stage (after one-day storage) of interfacial gap-formation in Class I restoration together with determination of associated mechanical properties (compressive strength and flexural strength).

Materials and Methods: Cavity preparation was made in occlusal surface of premolar teeth. Five HV-GICs were studied (Ketac Universal Aplicap, Ketac Molar Aplicap: 3M, Fuji IX GP, Fuji IX EXTRA, EQUIA Forte: GC, and two conventional glass-ionomer cements (C-GICs, Ketac Silver Aplicap: 3M, Fuji II: GC, as controls), with specimen sub-groups (n = 10 / group) for each property measured. After one-day storage and polishing, the restored teeth were sectioned in a mesio-distal direction through the center of the model Class I restorations. The presence or absence of interfacial-gaps was measured at x 1000 magnification at 14 points (each 0.5-mm apart) along the cavity restoration interface; (n=10; total points measured per group =140). Compressive and flexural strengths were measured (n = 10 / group), as described above.

Result: For HV-GICs and C-GICs, significant differences (p<0.05) in gap-incidence were observed. In the former case, 4-14 gaps were found. In the latter case, 21-24 gaps were observed. The compressive and flexural strengths of HV-GICs significantly increased compared to C-GICs.

Conclusions: It is thought that a HV-GIC is the useful and significant restorative material for some pediatric or geriatric patients.

Key Words: Highly-viscous glass-ionomer cement, Filling, Interfacial Gap-formation, Class I restoration, Mechanical properties.

Brief CV

- 1976-1982: Instructor, Department of Dental Material, Josai Dental University
- 1982-2007: Assistant Professor, Department of Dental Materials, Okayama University.
- 1984-1985: Visiting Researcher, Department of Dental Technology, The Royal Dental College Copenhagen
- 2007-present: Assistant professor, Department of Biomaterials, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Science.