

Journal of Prosthodontics Dentistry
An Official Publication of Bureau for Health & Education Status Upliftment
(Constitutionally Entitled As Health-Education, Bureau)

Evaluation of residual cement at implant abutment junction and in gingival mask with recementation and dental floss technique: an in-vitro study

¹Dr. Raghavendra Adaki, MDS, *²Dr. Banashree Sankeshwari, MDS,

³Dr. Dayanand Huddar, MDS, & ⁴Dr. Kalyani Gandhi, MDS

¹Professor and Head, Department of Prosthodontics, Bharati Vidyapeeth Dental College and Hospital, Sangli, Maharashtra, India.

²Associate Professor, Department of Prosthodontics, Bharati Vidyapeeth Dental College and Hospital, Sangli, Maharashtra, India.

³Professor, Department of Prosthodontics, Bharati Vidyapeeth Dental College and Hospital, Sangli, Maharashtra, India.

⁴Post graduate, Department of Prosthodontics, Bharati Vidyapeeth Dental College and Hospital, Sangli, Maharashtra, India.

Email Id: serviceheb@gmail.com

Abstract

Statement of problem: Complete removal of residual cement at the implant abutment interface and on subgingival margins after cementation of implant supported prostheses has been shown to be unpredictable. Residual cement at implant abutment interface is associated with peri-implantitis.

Purpose: To evaluate the amount of residual cement at the implant abutment interface and on laboratory gingival mask using two different cementation techniques.


Material and methods: Assembly of implant analog with regular platform and unprepared implant abutment with 1mm collar height were embedded in autopolymerizing acrylic resin block at the level of abutment implant analogue interface. Nickel chromium crowns were fabricated with access vent. The laboratory gingival mask was injected around the implant abutment interface to simulate peri-implant soft tissue of 1 mm thickness. The specimens were divided randomly into 2 groups, with each group receiving a different cementation technique i.e 15 samples were cemented using dental floss, 15 samples were cemented using modified cementation technique while cementing crown seated under constant load (80 N) for 10 minutes. The amount of residual cement was measured under stereomicroscope. Results were compared with t test.

Results: There was statistically significant difference seen for the values of residual cement between the groups of cementation using floss techniques and modified cementation techniques ($p < 0.05$) with higher values of residual cement for cementation using floss technique on all aspects.

Conclusion: Within the limitation of this in vitro study least amount of residual cement was present in modified cementation techniques compared to cementation using floss technique.

Clinical Significance: The residual cement if left over after cementation may lead to peri implantitis

Key words: residual cement, periimplantitis, cementation, precementation technique

Access this Article Online	Quick Response Code: 
Website: http://heb-nic.in/jopd	
Received on 03/04/2021	
Accepted on 07/04/2021 © HEB All rights reserved	