

OSC11: Clinical Factors Affecting Occlusal Re-Establishment of Resin-Bonded Bridges using Dahl Concept

Siti Nadia Rahimi, Mohd Zulkifli Kassim,
Siti Aisyah Shamsul Anuar, Siti Mariam Ab Ghani,
Izyan Hazwani Baharuddin, Tong Wah Lim

Centre for Restorative Dentistry Studies, Faculty of Dentistry,
Universiti Teknologi MARA, Selangor, Malaysia

Aims: Application of Dahl concept is suggested to create space for metal retainer of the resin bonded bridge (RBB) to maximize the retainer coverage. The aim of this study was to evaluate the occlusal re-establishment using RBB that were cemented at an increased vertical dimension (Dahl Concept) and factors affecting it.

Materials and Methods: A retrospective study was carried out where clinical data of patients who received RBBs from undergraduate students following the standardized treatment protocol were retrieved. At review, the occlusal re-establishment was assessed using Shimstock foil and compared with the pre-operative occlusal record. The details of patients' factors and prostheses parameters were obtained from the patients' record. The influence of these factors on the occlusal re-establishment was further analysed using multiple logistic regression test.

Results: A total of 151 RBBs were reviewed in 109 patients after a minimum of 4 months follow-up period. 90% of subjects achieved full occlusal re-establishment (Shimstock holds between all opposing units as per pre-operative occlusal analysis) while 10% exhibited partial occlusal re-establishment (Shimstock holds on some of the opposing units). Patient factors (n=109); demographic, number of missing teeth and number of RBB, as well as RBB parameters

(n=77); design, arch and site of RBB were not significantly ($p>0.05$) associated with the occlusal re-establishment.

Conclusion: High percentage of subjects achieved full compared to partial occlusal re-establishment after placement of RBB. None of the clinical factors were significantly associated with the occlusal re-establishment.

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