

Adhesive Cementation

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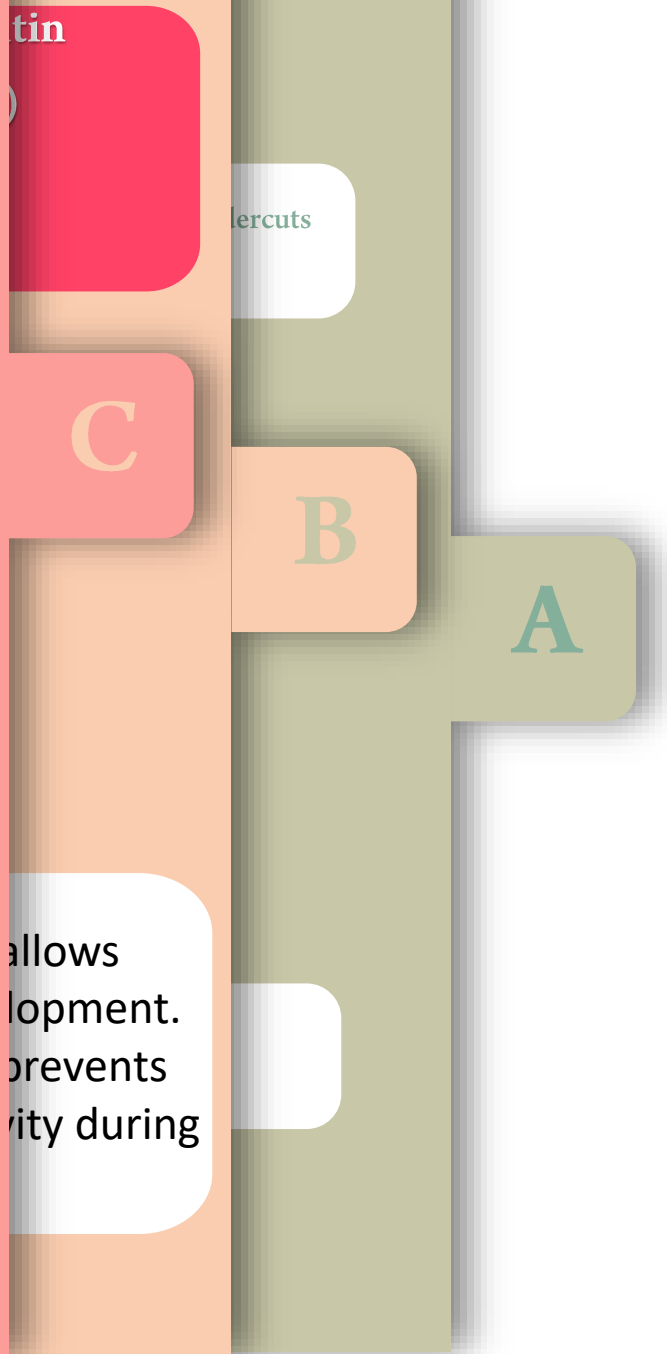
dentin to 20

ending on the

ght brushing

depending on type

) to the adhesive and
s



Provisional restorations...

Can be a challenge

- Because of the nonretentive design of the preparations.
- Eugenolcontaining cement should not be used.

Temporary restoration



Adhesion of temporary onlay



Try in...



Try in





SHORT TOOTH


Adhesive
Cementation

- 1 Three-step etch-and-rinse lightcured-only adhesive systems should not be used under indirect posterior bonded restorations.
- 2 Three-step etch-and-rinse dual-cured systems as the *adhesive system of choice*.
- 3 The dual-curing process results in more complete polymerization than that achieved with chemical polymerization alone.
- 4 The shelf life of dual-cured resins is shorter than that of conventional light-cured resin composites.
Most dual-cured luting resins should polymerize at room temperature in the dark within 10 minutes.

Preparing the restoration for bonding...

- Adhesion is more reliably achieved to ceramic materials than to resin composite restorations.
- Bonding to resin composite restorations is more difficult. The intaglio surface has no air-inhibited layer → few unreacted methacrylate groups.





IPS e.max onlay

Preparing the tooth for bonding...

- Ensuring an isolated operating field is a critical step in the adhesive bonding process.



- Cervical margin relocation technique (CMR) or Deep margin elevation (DME)



Review

Cervical margin relocation in indirect adhesive restorations: A literature review

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ABSTRACT

Purpose: The aim of this review was to summarize the existing scientific literature investigating on cervical margin relocation technique (CMR) performed prior to the adhesive cementation of the indirect restorations.

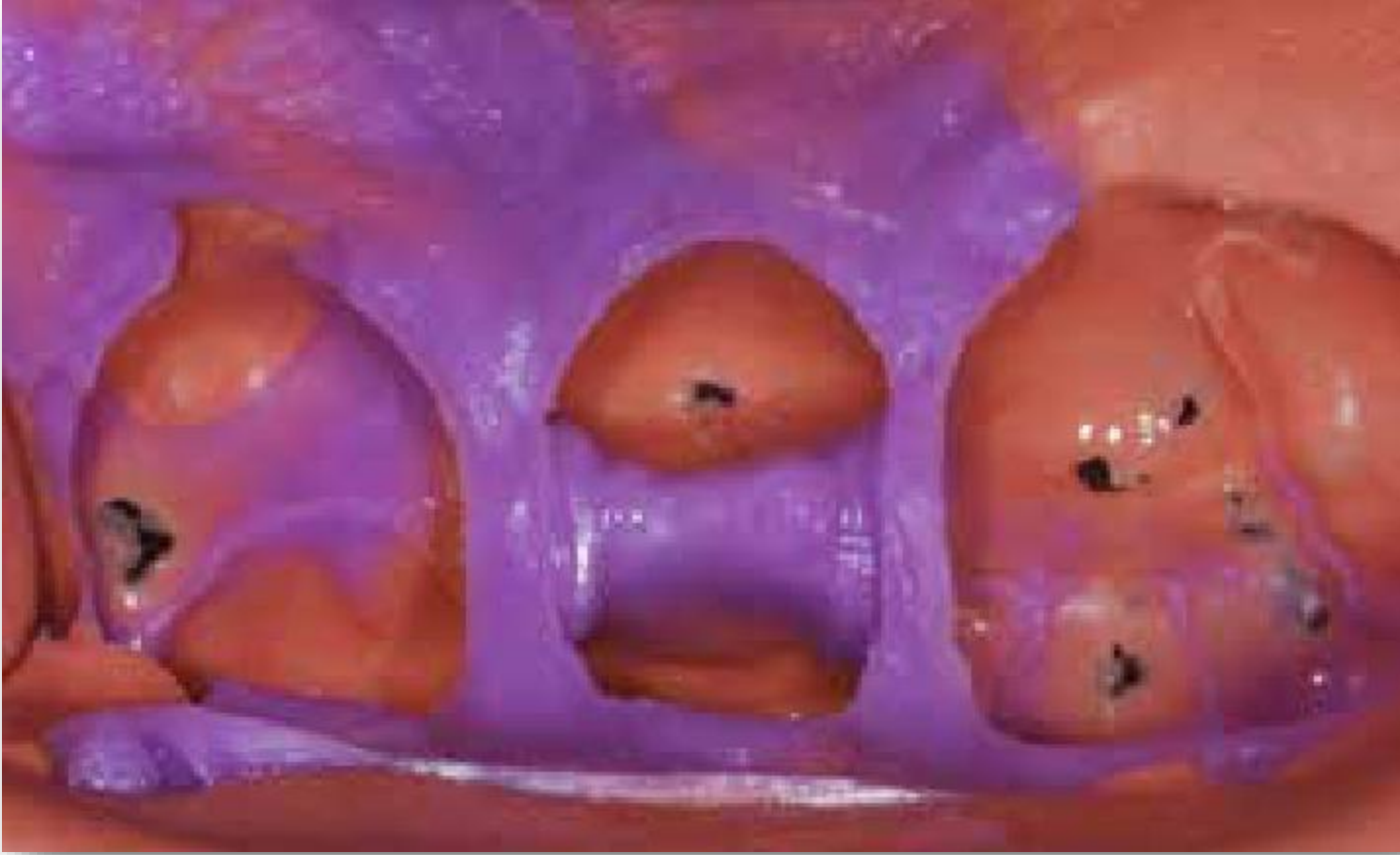
Study selection: An electronic search with no date restriction was conducted in the MEDLINE database, accessed through PubMed. The following main keywords were used: “cervical margin relocation”, “coronal margin relocation”, “deep margin elevation” and “proximal box elevation”.

Results: Seven *in vitro* studies and 5 clinical reports investigating on CMR are taken into consideration for the present review. The most frequently investigated parameter in almost all of the *in vitro* studies was the marginal adaptation of the indirect restorations. One study additionally assessed the influence of CMR on the fracture behavior of the restored teeth and one study assessed the bond strength of the indirect composite restoration to the proximal box floor. Clinical reports provided documentation with a detailed description of the treatment protocol. In the current literature no randomized controlled clinical trials or prospective or retrospective clinical studies on CMR technique could be found.

Conclusions: On the basis of the reviewed literature, it can be concluded that currently there is no strong scientific evidence that could either support or discourage the use of CMR technique prior to restoration of deep subgingival defects with indirect adhesive restorations. Randomized controlled clinical trials are necessary to provide the reliable evidence on the influence of CMR technique on the clinical performance, especially on the longevity of the restorations and the periodontal health.

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Impression of the cavity

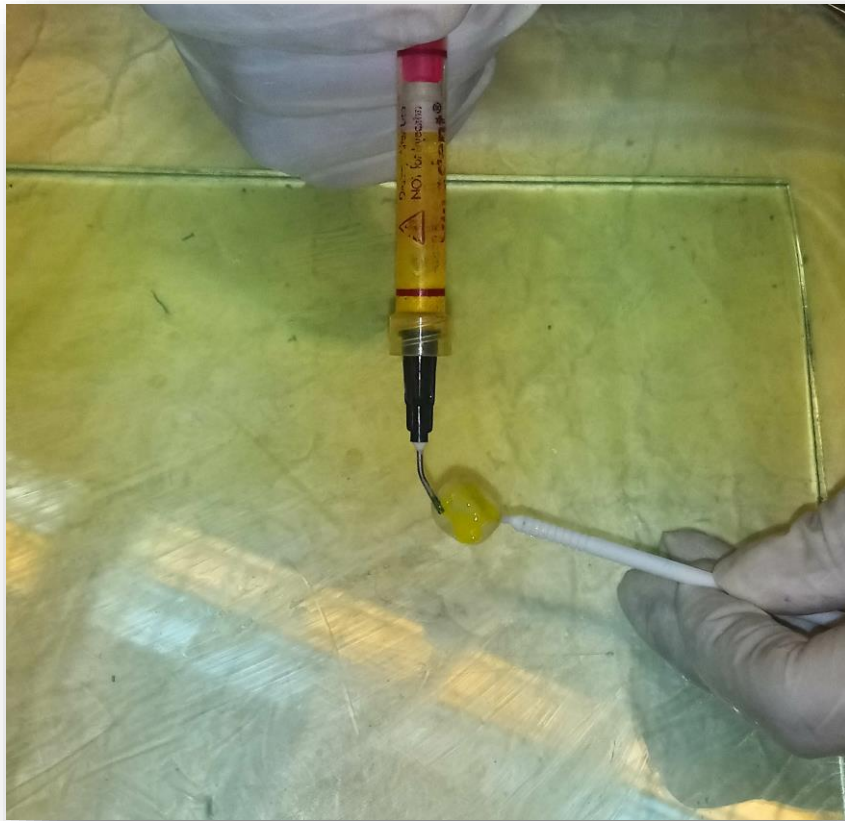


- Opposite arch impression
- Bite record
- Shade selection

Heat-pressed lithium disilicate



HF 5% for 20 sec / silane

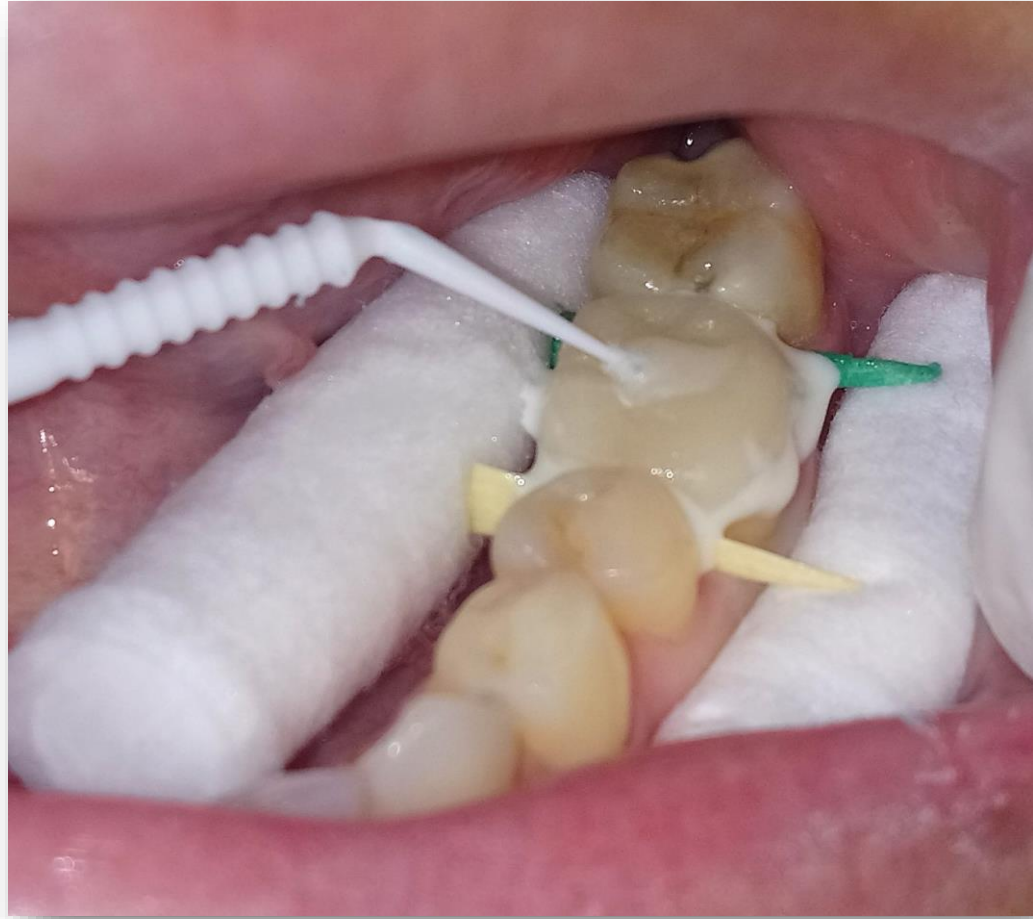


PANAVIA F 2.0 : Self-etching; Dual-cure



Etching (enamel)







Glycerin → on the margins



Hayashi et al...

- An 8-year clinical study that evaluated marginal wear using an optical laser scanner.
- Three-stage pattern:
 - The initial stage → rapidly from initial placement to 21 months.
 - The second stage → progressed at a much slower rate. (21 to 72 months)
 - The third stage → from year 6 to year 8, the marginal deterioration again accelerated to a much faster rate.

