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REVIEW ARTICLE

Deep Margin Elevation:A Conservative Alternative in Restorative Dentistry

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ABSTRACT

Deep margin elevation (DME) has also become a less invasive restorative method which offers an alternative procedure compared to the traditional surgery methods like crown lengthening. DME helps to provide adequate isolation, enhance adhesive bonding, and predictably place indirect restorations through the relocation of deep subgingival margins coronally with adhesive restorative material. The procedure preserves the tooth structure, causes minimal damage to periodontal tissue, and improves the restorative performance with little surgical intervention. Although technique sensitivity and proper case selection is also of paramount importance, laboratory and clinical research indicate that DME can be used to achieve desirable marginal adaptation, biomechanical performance, and periodontal stability. As the focus on conservative dentistry is growing, DME is poised to become an option that is both practical and biologically respectful to use in dealing with difficult subgingival margins.

Keywords: Deep margin elevation, restorative dentistry, adhesive dentistry, minimally invasive techniques, subgingival margins, crown lengthening alternatives, composite resin.

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INTRODUCTION

Restorative dentistry has increasingly become minimally invasive, with a focus placed on tooth-structure preservation, biological harmony, and functional longevity. Although effective, traditional methods of managing the deep subgingival margins, including surgical crown lengthening or orthodontic extrusion, have been linked with disadvantages such as increased treatment time, further surgical morbidity, disrupted aesthetics and altered crown-to-root ratios. These restrictions have been encouraging clinicians to think of conservative options, which offer a balance between biological respect and restorative predictability.

Proximal box elevation or Deep Margin Elevation (DME) is one such conservative method. The principle is to move a deep cervical margin out of an inaccessible subgingival position into a more coronal, and manageable clinically position, by placing adhesive restorative materials, usually resin composites. The clinician is able to attain enhanced visibility, accessibility and isolation when performing restorative procedures by successfully elevating the margin. This alteration also enables adhesive bonding, marginal adaptation, and the effective placement of direct and indirect restorations in teeth that would otherwise pose a great challenge to restorative efforts.

Biologically, DME is focused on ensuring healthy periodontal health by respecting supracrestal tissue attachment (previously known as biologic width). This technique is less invasive with regard to the requirement of surgical intervention in cases of appropriate selection of cases, appropriate isolation, and controlled restorative protocols, and it preserves the integrity of the supporting structures. Moreover, adhesive systems and restorative materials developments have enhanced the viability of DME through enhancing the longevity of the bonds, marginal sealing, and the stability of restorative interfaces in the long-term that are laid at or adjacent to the gingival area.

DME has several clinical benefits: DME maintains natural tooth structure, less morbidity (than surgical solutions), and fits easily within adhesive and digital workflows. Nevertheless, it does not come without problems. The method is very operator sensitive, and involves careful isolation and could be limited in situations whereby the subgingival margins are too near the alveolar crest and periodontal tissues might be violated. These points remind us that great care needs to be taken in diagnosing, strategizing treatment and the knowledge of both the restorative and periodontal principles in using this

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approach.

Considering the increasing need of conservative, yet predictable restorative solutions, DME has developed the following as a potentially viable and biologically respectful alternative to conventional methods of lengthening the crown. It provides clinicians with the possibility to handle complex restorative situations in such a way that focuses on the functional outcomes as well as the patient-centered care. The present paper addresses the concepts, methods, benefits, constraints, and support of the concept of deep margin elevation in modern restorative dentistry.

BIOLOGICAL AND CLINICAL CONSIDERATIONS

Implementation of Deep Margin Elevation (DME) needs a high level of understanding of both biological and clinical aspects which determine the health of the periodontal and restorative success. The space between the restorative margin and the gingival tissues is a critical area because the placement or management may interfere with adhesion, cause inflammation, or influence the outcome of the tooth and the tissue in the long-term.

Periodontal and Biological Width Considerations

Biological width, that is the height of the junctional epithelium and connective tissue to the root surface is an essential concept which is to be applied when treating subgingival margins. The breach of this space can lead to inflammation that is chronic, pocket development, and loss of the alveolar bone. DME aims to move deep margins of the cornea with adhesive material so that it does not infringe the biological width unnecessarily but facilitates more accessibility to the areas requiring restoration. To ensure that the selected cases are appropriate, special care is required especially in cases where margin is too near towards the alveolar crest because the long-term stability of the tooth may be undermined by extension past the periodontal tolerance.

Gingival Tissue Response to Restorative Margins

Subgingival restorative margins have been linked in the past to enhanced production of plaque and gingival irritation. Nevertheless, there is evidence indicating that with a proper finishing, polishing, and supragingival maintenance of margins following DME, the aging rival tissues portray stable and healthy reactions. The restorative interface quality, such as smoothness, marginal integrity, and biocompatibility of materials, determines decisively the process of the minimization of inflammation. In addition, the correct application of matrices and retraction systems in the procedure is essential because it allows atraumatic work on the gingiva that is critical in supporting tissue healing and long-term periodontal balance.

Adhesion Challenges at Deep Margins

Bonding to deep dentin or cementum is inherently more difficult to bond as compared to bonding to enamel, because of differences in substrate composition as well as inaccessibility. Minimal mineral content, the existence of dentinal tubules and the potential contamination of adhesive by crevicular fluid or blood decrease adhesive performance. DME solves such problems by raising the margin to a more coronal posture in which isolation can be effectively obtained. The factors such as use of contemporary bonding agents, selective etching of enamel and incremental placement of composite resin are vital in this process as a method of attaining long term holding. The development of adhesive dentistry has improved the predictability of such a technique, but long-term clinical results continue to be heavily dependent on the operator and case-specific factors.

Risk of Marginal Leakage and Secondary Caries

Risk of microleakage, resulting in bacteria, marginal staining, and secondary caries is one of the main issues in restorative dentistry. Deep subgingival margins are especially prone because of the inaccessibility to the finishing and polishing of the area. DME eliminates this risk by moving the restoration interface coronally, which promotes sufficient contouring, finishing, and sealing of margins. Research has indicated that DME done with composite resins when finished correctly and undertaken to achieve the intended polymerization, have satisfactory sealing capabilities. However, operator accuracy, choice of materials, and high moisture control is compulsory to reduce microleakage and promote the long life of the restoration.

Clinical Operability and Accessibility

Practically, DME enhances the clinical functionality by providing more desirable conditions in placing rubber dams, impressions, scanning of digital images, and cementing of indirect restorations. Clinicians can lessen the chances of contamination by adhesive procedures by raising the margins at the coronium, which improves predictability of the restorations. Easier access also allows a better visualization and finishing resulting in a transition and minimized retention of plaque in the restorations.

TECHNIQUES AND MATERIALS FOR DEEP MARGIN ELEVATION

Deep Margin Elevation (DME) is primarily a restorative technique designed to relocate subgingival margins coronally using adhesive restorative materials. The success of the procedure relies heavily on strict adherence to proper clinical protocols and the use of appropriate materials. This section outlines the step-by-step technique, the critical role of adhesive protocols, and the types of restorative materials and matrices employed.

Clinical Protocol for DME

The DME procedure generally follows a series of carefully sequenced steps:

Isolation of the operating field

Rubber dam placement is the gold standard to ensure a dry field and prevent contamination of the adhesive interface. In challenging subgingival cases, customized clamps or gingival retraction may be required.

Caries removal and margin assessment

All infected dentin is removed while preserving as much sound tooth structure as possible. The margin is carefully evaluated to confirm biological width respect.

Matrix placement

Sectional or circumferential matrices with firm adaptation are applied to guide contour and prevent excess composite extension into the sulcus. Pre-contoured sectional matrices are often preferred to recreate natural proximal anatomy.

Adhesive application

A selective enamel etching or universal adhesive approach is recommended depending on the substrate. Adhesive systems with strong dentin bonding capability are favored.

Incremental composite build-up (margin elevation)

A thin layer of flowable composite is typically placed first to enhance adaptation, followed by incremental layers of highly filled packable composite. The margin is built up until it reaches a supragingival or equigingival level.

Finishing and polishing

Overhanging composite is carefully removed, and margins are polished to reduce plaque retention and ensure periodontal compatibility.

Final restoration

Once the margin is relocated, indirect restorations such as inlays, onlays, or crowns can be planned with predictable adhesive bonding and improved visibility.

Adhesive Considerations

Adhesion is a critical determinant of long-term success. Selective enamel etching provides optimal enamel bonding, while universal adhesives offer versatility for dentin margins. Proper light curing through translucent matrices and incremental placement ensures polymerization and reduces microleakage.

Restorative Materials for Margin Elevation

The choice of material depends on handling properties, adaptation to subgingival areas, and mechanical performance:

Flowable composites

Excellent adaptation to irregular dentin surfaces and ease of placement; however, they exhibit lower wear resistance and should not be used as the only bulk material.

Packable nanohybrid composites

Provide superior mechanical strength, wear resistance, and marginal stability. Used in combination with a flowable liner, they form the main body of the elevation.

Bulk-fill composites

Useful for deeper areas due to improved depth of cure, but polymerization shrinkage and handling must be carefully managed.

Resin-modified glass ionomer cements (RMGICs)

Occasionally employed as a liner in deep margins; they provide chemical adhesion to dentin and fluoride release but exhibit inferior mechanical properties compared to composites.

Matrix Systems and Isolation

Effective matrix placement ensures proper contour and prevents overhangs. Sectional matrices combined with separation rings are highly effective in proximal areas. Circumferential matrices may be required in complex cavities. In cases with difficult access, Teflon tape or retraction cords may be used to control gingival tissues.

Clinical Pearls and Recommendations

- Always ensure biological width is respected to avoid chronic inflammation.
  - A combination of flowable and packable composites provides the best compromise between adaptation and strength.
  - Careful finishing and polishing are crucial to ensure periodontal stability and long-term success.
  - Case selection remains critical DME is most effective in cases where margins are accessible and periodontal prognosis is favorable.

ADVANTAGES OF DEEP MARGIN ELEVATION

Table 1. Summary of Techniques and Materials for Deep Margin Elevation

Step/Component	Clinical Considerations	Commonly Used Materials/Systems	Advantages	Limitations
Isolation	Essential for contamination control	Rubber dam, customized clamps, gingival retraction systems	Moisture control, visibility, improved bonding	Challenging in subgingival margins
Matrix placement	Accurate contouring of proximal walls	Sectional matrices, circumferential matrices, separation rings	Prevents overhang, guides contour	Poor adaptation can lead to excess composite
Adhesive protocol	Strong bonding to enamel and dentin essential	Universal adhesives, selective enamel etching systems	Versatility, reliable adhesion	Technique sensitivity
Initial build-up (liner)	Enhances marginal adaptation	Flowable composite, RMGIC	Flowability, adaptation to irregular margins, fluoride release	Low wear resistance (flowable); weaker strength (RMGIC)
Core build-up	Provides mechanical stability and supragingival margin relocation	Packable nanohybrid composite, bulk-fill composite	Strength, wear resistance, depth of cure	Polymerization shrinkage, technique sensitivity
Finishing & polishing	Prevents plaque accumulation, ensures periodontal health	Fine diamond burs, polishing disks, strips	Smooth surface, reduced inflammation	Requires meticulous execution
Final restoration	Achieved after margin relocation	Indirect restorations: inlays, onlays, crowns	Predictable adhesion, improved esthetics	Dependent on successful DME foundation

Deep Margin Elevation (DME) offers several clinical and biological advantages that position it as a valuable alternative to conventional approaches, particularly surgical crown lengthening and orthodontic extrusion. The technique aligns with the philosophy of minimally invasive and adhesive dentistry, which emphasizes preservation of sound tooth structure while restoring function and esthetics. The key advantages are discussed below:

Preservation of Tooth Structure

One of the primary benefits of DME is its conservative nature. Unlike surgical crown lengthening, which necessitates removal of periodontal and alveolar bone, DME elevates the restorative margin coronally through the placement of composite resin. This preserves the natural architecture of the periodontium and avoids compromising root length or crown-to-root ratio. Tooth preservation is particularly important in posterior teeth, where structural stability and longevity are directly related to the amount of remaining tooth substance.

Minimally Invasive and Patient-Friendly

Surgical interventions, although effective, often require multiple visits, postoperative care, and extended healing times. By contrast, DME can be performed in a single clinical session without surgical trauma, leading to reduced morbidity and greater patient comfort. The absence of surgical manipulation of the soft and hard tissues eliminates the risks of postoperative pain, swelling, or esthetic concerns associated with gingival recession.

Facilitates Adhesive Dentistry and Restorative Procedures

DME relocates subgingival margins to a supragingival or equigingival position, making them more accessible for adhesive procedures. This ensures optimal moisture control, improved visibility, and predictable placement of adhesive restorations. The elevated margins allow clinicians to achieve reliable bonding, reduce the risk of contamination, and enhance the quality of composite resin adaptation. Furthermore, this margin relocation supports the use of adhesive indirect restorations such as onlays, inlays, and overlays, expanding the range of restorative options available.

Improved Marginal Integrity and Reduced Leakage

By raising deep margins coronally, DME helps minimize microleakage and bacterial infiltration, which are common concerns with subgingival restorations. Elevated margins positioned within a more favorable environment promote better polymerization of composite resins and ensure stronger adhesive interfaces. Improved marginal integrity is closely associated with reduced incidence of recurrent caries and extended longevity of restorations.

Enhanced Periodontal Compatibility

When properly executed, DME respects the biologic width and minimizes trauma to the periodontal tissues. This ensures long-term periodontal stability, as restorative margins are placed in areas less prone to plaque accumulation and inflammation. Clinical studies have indicated that well-finished and polished composite

margins located near the gingival margin can be compatible with periodontal health, provided meticulous oral hygiene and proper contouring are maintained.

Time-Efficient and Cost-Effective

Compared to surgical crown lengthening or orthodontic extrusion, which often require prolonged treatment time and additional cost, DME offers a more efficient and economical solution. The procedure can typically be completed during the same appointment as cavity preparation and restoration, eliminating delays in the restorative process and improving workflow efficiency for both patients and clinicians.

Versatility Across Restorative Scenarios

DME can be applied in a wide variety of clinical situations, including management of deep carious lesions, fractured teeth extending below the cemento-enamel junction, and cases requiring indirect adhesive restorations. This versatility makes it a valuable tool in both anterior and posterior restorative dentistry, particularly where surgical options may compromise esthetics or function.

LIMITATIONS AND CHALLENGES

Although Deep Margin Elevation (DME) has gained attention as a conservative alternative to surgical crown lengthening, it presents certain limitations and challenges that require careful consideration by clinicians. The procedure is not universally applicable and demands strict adherence to biological, material, and technical principles.

Technique Sensitivity

DME is highly technique-sensitive. Successful outcomes depend on achieving proper isolation of the operative field, optimal use of adhesive systems, and precise placement of restorative materials. Inadequate control of moisture, blood, or gingival crevicular fluid can compromise bond integrity and increase the risk of marginal leakage or restoration failure.

Biological Considerations

Performing DME close to the alveolar crest may impinge on the supracrestal tissue attachment (biological width). If the restorative margin is placed too deep, it can cause gingival inflammation, attachment loss, and long-term periodontal compromise. Periodontal response varies between patients, making biological risks an important limitation.

Marginal Integrity and Adhesion

Bonding to dentin and cementum at deep subgingival levels is less predictable than bonding to enamel. Margins in dentin or cementum may result in weaker adhesion, increased microleakage, and higher risk of secondary caries. The choice of adhesive system and restorative material significantly impacts the longevity of the restoration.

Case Selection Restrictions

Not all clinical scenarios are suitable for DME. In cases with insufficient residual coronal structure or inadequate ferrule effect, surgical or orthodontic alternatives may be required to ensure long-term stability. Patients with poor periodontal health or high caries risk may not be ideal candidates.

Lack of Long-Term Clinical Evidence

While in vitro studies and short-term clinical trials suggest positive outcomes, long-term evidence remains limited. There is still insufficient consensus on the durability of DME restorations compared with traditional approaches. This uncertainty makes it essential for clinicians to carefully weigh risks and benefits before adopting the technique routinely.

Operator-Dependent Outcomes

Since DME is a relatively advanced restorative technique, clinical success is largely dependent on operator experience and expertise. Inadequate training or lack of familiarity with adhesive protocols can compromise clinical outcomes.

Patient-Related Factors

Patient compliance with oral hygiene, susceptibility to caries, and periodontal health status greatly influence the prognosis of restorations involving DME. In patients with poor plaque control or systemic conditions affecting periodontal health, the risk of failure increases.

While Deep Margin Elevation offers significant advantages as a minimally invasive restorative approach, it is not free from limitations. Careful case selection, mastery of adhesive techniques, respect for periodontal biology, and consideration of long-term prognosis are crucial to optimizing success. The limitations outlined above highlight the importance of evidence-based decision-making and the need for ongoing research to strengthen clinical protocols.

CLINICAL INDICATIONS AND CASE SELECTION

The success of Deep Margin Elevation (DME) relies heavily on proper case selection. Not every clinical scenario with subgingival margins is suitable for this technique. Clear understanding of the indications, contraindications, and clinical judgment factors is

Table 2. Limitations and Challenges of Deep Margin Elevation

Limitation/Challenge	Description	Clinical Implication
Technique Sensitivity	Requires strict isolation, proper adhesive application, and precise layering	Increased risk of failure if technique is not meticulously followed
Biological Risks	Potential violation of supracrestal tissue attachment (biological width)	May lead to gingival inflammation, bone loss, or attachment loss
Marginal Integrity	Bonding to dentin/cementum is less reliable than enamel	Higher risk of marginal leakage, secondary caries, and restoration failure
Case Selection	Not suitable for teeth with insufficient ferrule, poor periodontal prognosis, or deep fractures	Alternative approaches such as crown lengthening or orthodontic extrusion may be necessary
Evidence Gap	Limited long-term clinical studies available	Uncertainty regarding restoration survival rates and periodontal outcomes

essential to achieve predictable outcomes.1. Clinical Indications

DME is indicated in restorative cases where margins extend into deep proximal or cervical areas that are otherwise inaccessible for adhesive procedures or impression-taking. The main indications include:

Subgingival carious lesions

When proximal caries extend below the cemento-enamel junction (CEJ) but remain within a biologically acceptable distance from the alveolar crest.

Fractured teeth

Vertical or oblique fractures involving proximal surfaces where restoration margins would otherwise be inaccessible.

Cervical defects

Structural loss due to erosion, abrasion, or abfraction extending subgingivally.

Indirect restorations with deep margins

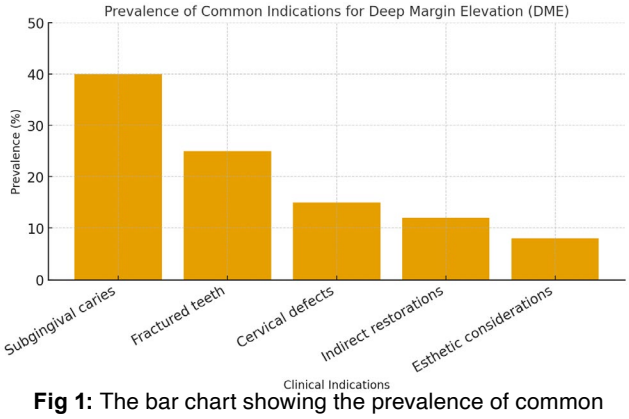

Fig 1: The bar chart showing the prevalence of common indications for Deep Margin Elevation (DME).

Situations where crowns, onlays, or veneers would be compromised by inaccessible margins.

Esthetic zones

Cases where crown lengthening would result in unfavorable gingival levels or compromised esthetics.

Contraindications

While DME provides significant advantages, certain conditions reduce its predictability:

Lesions or margins located too close to the alveolar crest where biological width invasion is inevitable.

Lack of ferrule effect in severely compromised teeth, limiting the long-term stability of indirect restorations.

Poor periodontal prognosis, including advanced attachment loss or poor oral hygiene that threatens restorative longevity.

Teeth with extensive structural compromise better suited for extraction or surgical management.

CASE SELECTION CRITERIA

For clinicians, case selection should balance tooth preservation, periodontal health, and restorative predictability. Key considerations include:

Biological width evaluation

A minimum of 2–3 mm distance between the margin and alveolar crest should be maintained.

Isolation feasibility

Rubber dam placement must be achievable after elevation of the margin.

Restorability assessment

The tooth must be restorable with sufficient residual structure to support adhesive restoration and withstand occlusal forces.

Patient-related factors

Good oral hygiene, compliance, and low risk of periodontal disease progression are essential.

Alternative evaluation: If surgical crown lengthening or orthodontic extrusion provides a better long-term prognosis, these options should be weighed.4. Clinical Relevance

Proper case selection ensures that DME not only preserves tooth structure but also maintains periodontal stability and enhances restorative outcomes. When applied judiciously, it allows clinicians to avoid invasive procedures while providing patients with functional and esthetic long-term restorations.

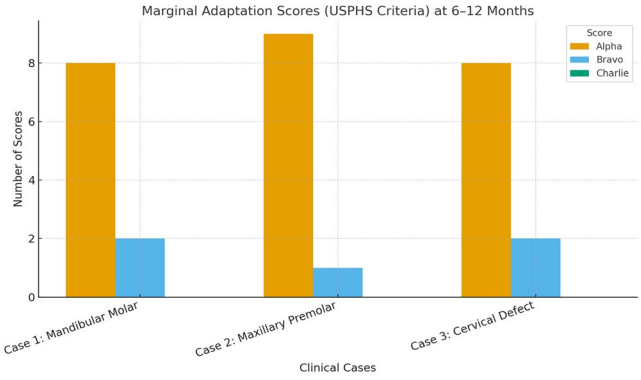

Fig 3: The bar chart illustrating marginal adaptation scores (Alpha, Bravo, Charlie) at 6–12 months for the three presented clinical cases.

Case Reports / Clinical IllustrationsCase

Case Deep Carious Lesion in a Mandibular Molar

A 42-year-old patient presented with a fractured distal cusp and secondary caries extending below the cemento-enamel junction of the mandibular left first molar. Radiographic evaluation confirmed that the carious lesion extended approximately 1.5 mm apical to the gingival margin. Traditional crown lengthening was considered; however, to preserve periodontal architecture, a decision was made to perform deep margin elevation.

After achieving rubber dam isolation, the caries was excavated, and a sectional matrix was placed. A flowable composite resin was incrementally layered to elevate the margin to a supragingival position, followed by reinforcement with a nanohybrid composite. The tooth was subsequently restored with an indirect ceramic onlay. At the 12-month follow-up, the restoration demonstrated excellent marginal integrity, no postoperative sensitivity, and stable periodontal health.

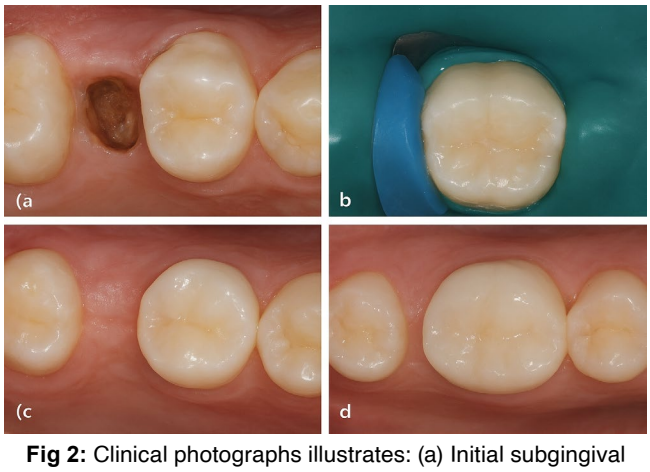

Fig 2: Clinical photographs illustrates: (a) Initial subgingival carious lesion, (b) Matrix placement and elevation with flowable composite, (c) Completed onlay restoration, (d) One-year follow-up showing periodontal health.

Case Subgingival Fracture in a MaxillaryPremolar

A 35-year-old female patient reported with a vertical fracture of the mesial wall of the maxillary right first premolar. The fracture line extended 2 mm below the gingival margin, complicating moisture control and potential adhesive procedures. After periodontal probing and radiographic assessment, the tooth was deemed restorable using DME.

Following careful placement of a sectional matrix system and rubber dam, a dual-cure flowable composite was used to elevate the margin coronally. This allowed successful bonding and placement of a lithium disilicate crown. Clinical and radiographic examination at 18 months revealed stable gingival tissues and no evidence of marginal discoloration or recurrent caries.

Cervical Defect in a Premolar with Esthetic Concerns

A 28-year-old patient presented with a cervical defect on the palatal aspect of a maxillary premolar extending slightly subgingivally. The patient expressed esthetic concerns and desired a minimally invasive solution. DME was performed using a pre-contoured matrix band and a nanohybrid composite resin. The elevated margin allowed for the placement of an indirect veneer. At six months, clinical evaluation revealed excellent marginal adaptation and gingival harmony.

Summary of Clinical Insights

- DME enabled supragingival relocation of deep margins in varied clinical situations (caries, fracture, and cervical defects).
- Adhesive protocols with flowable composites ensured predictable bonding and facilitated isolation.
- Follow-up outcomes across cases demonstrated

Table 3: comparing Case 1 and Case 2 parameters:

Parameter	Case 1 (Mandibular Molar)	Case 2 (Maxillary Premolar)
Patient Age / Sex	42 / Male	35 / Female
Clinical Problem	Deep distal caries	Subgingival fracture
Depth of Margin	1.5 mm below CEJ	2 mm below gingiva
Technique Used	Flowable + nanohybrid composite	Dual-cure flowable composite
Final Restoration	Ceramic onlay	Lithium disilicate crown
Follow-up Outcome	Excellent adaptation, no sensitivity	Stable gingiva, no marginal leakage

excellent marginal integrity, periodontal stability, and patient satisfaction.

- Collectively, these case illustrations highlight the versatility of DME in restorative practice and its value as a biologically conservative alternative to surgical interventions.

CONCLUSION

The deep margin elevation is a beneficial development in modern restorative dentistry, which presents a less invasive and biologically sensitive substitute to the traditional methods of surgical crown lengthening or orthodontic extrusion. Clinicians can maintain a good tooth structure, minimize the chances of unwarranted damage to periodontal tissues, and can provide conditions conducive to the best adhesive procedures and restorative results by increasing the depth of subgingival margins to a more easily reachable supragingival position using adhesive restorative materials.

The method blends perfectly with the tenets of the minimally invasive approach to dentistry, which correlates well with the increasing calls of the treatment approaches that consider both the biological width and long-term periodontal health. Not only does DME enable clinicians to ensure the tooth remains vital, it also provides predictable outcomes in a scenario where deep caries, fractures, or cervical defects otherwise undermine the success of a restorative procedure. Its clinical efficacy in achieving desirable marginal adaptation, enhancing bonding reliability, and the long-term integrity of indirect restorations are clinically and in vitro supported.

Though deep margin elevation has obvious benefits, it does not have any drawbacks. Its success is determined by the selection of cases, proper isolation and strict adhesive procedures. Where periodontal health is impaired or a ferrule effect is not possible, then traditional surgical or orthodontic options might still be more suitable. In addition, the clinical evidence remains weak in the long run, and additional well-structured research is needed to pool the existing evidence, in particular, pertaining to periodontal stability and restoration longevity.

In general, deep margin elevation increases the selection of conservative restorative solutions that clinicians may employ to stabilize treatment; however, it does not impair the structural and biological integrity of the tooth. When used appropriately, it is a trustworthy and patient-oriented method in the restoration and adhesive dentistry.

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