

Regaining pink esthetics with Gingival Veneers – A cosmetic solution

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Abstract

Esthetics is a significant aspect of dentistry and the color of the gingiva, especially in the anterior region, plays an important role in overall esthetics. Gingival recession is defined as the location of the marginal tissue apical to the cemento-enamel junction (CEJ). This condition may be associated with periodontal disease or other related factors like faulty tooth brushing technique, etc. With modern advances in all phases of dentistry, it has provided an opportunity for the patients to maintain their natural esthetics. This case report describes a technique to correct multiple gingival recession with the Gingival composites. Gingival – composites allow the appearance of natural looking gingiva. These new materials provide good esthetics with gingival veneers in the exposed root surfaces.

Keywords: Esthetics, Gingival veneers, Recession

Introduction

Gingival recession within the esthetic zone, especially in maxillary anterior region is of major concern for a patient as well as to a dentist. Gingival recession may result in dentinal hypersensitivity, root caries and inability to perform oral hygiene procedures. To bring back the natural esthetics of exposed roots presents one of the challenges to periodontal treatment. Advances in dentistry, as well as the increased desire of patients to maintain their esthetics, have led to varied treatment options. The reconstruction of severe gingival recession with a prosthesis like gingival veneer can be useful to correct the deformities remaining after the control of periodontal diseases.^(1,2) With the invention of gingival composites, a dental practitioner can provide comfortable and accurately fitting gingival veneers, that are very stable and esthetically restore the interdental papilla and gingival recession. This method is an innovative treatment option for dealing with esthetic challenges and long-term dental health. Gingival – composites are used for gingival veneering for good esthetics.⁽³⁾ They are available in various shades for gingiva. These light-cure veneer resins have excellent properties, they bond well and are chip resistant. Its application is easy. It is light-cured radioopaque restorative material which contains 80% fillers in methacrylate matrix and which can be cured with blue light. They are available in syringes and can be used with the dentin / enamel bond. The system comprises of different opaques and a gingival shaded composite restorative in a basic color. These light-cure opaques are used to cover the discolored cervical areas and to adapt the restoration to the surrounding gingiva. This light-cured material allows a simplified and fast restorative technique to mimic the natural gingiva. Indications of gingiva colored restorative systems are:

- Gingival recession, as a result of a periodontal disease.
- Class V restoration (cervical caries, root erosion, V-shaped defects).
- Covering of exposed discolored hypersensitive necks of teeth, especially in the visible anterior area.
- Highly esthetic corrections of malpositions of teeth, direct veneers, facing and correction of esthetics.

This article describes a simple procedure for covering multiple exposed root surfaces with a gingival composite.

Case Report

A 35-year-old female patient was referred to the Department of Periodontology at Saraswati Dental College, Lucknow, India, with a chief complaint of hypersensitivity and receding gums in upper front teeth. The patient had generalized gingival recession in the maxillary anterior teeth (Fig. 1). The procedure was well explained to the patient, and an informed consent was obtained from her. A root coverage procedure with gingival composite was planned. The exposed root surfaces were thoroughly planed with a curette until the root surfaces were smooth. The involved teeth were cleaned with a fluoride free paste. To ensure a sufficiently dry work field, a rubber dam was used. After this, the teeth were prepared with minimally invasive technique with a diamond bur. This was carried out to conserve the tooth structure as much as possible. It is not necessary to prepare a caries-free cervical defect. In such cases only cleaning with a paste or pumice and a rubber cup or rotating brushes is sufficient. All the residues from the prepared surface were removed with a water jet. Any contamination with blood or saliva was avoided after cleaning. After this,

water residues were removed with a faint airjet, without overdrying the dentin. The aim is to achieve a moist, but not wet dentin surface (moist bonding). Then a bonding agent is applied and the exposed roots are covered with a matching gingiva colored composite filling material in a layering fashion. The dark or yellowish necks of teeth can impair the colour effect of the restoration. Therefore, these cervical areas should be covered with the enclosed opaque system before applying the filling material. The colour can individually be adapted step by step by mixing the opaques. The opaquer was applied on the surfaces of the teeth to cover completely and disperse it thinly, then it was light-cured for 40 seconds. A second coat of opaquer was also applied depending on the severity of the case, and it was again light-cured for 40 seconds. After this, the gingiva colored composite filling material was applied in layers of 2mm thickness. Each layer was light-cured for 40 seconds. It was ensured that a good marginal adaptation was obtained. Contouring and finishing of the filling was done with a fine or extra fine diamond polishers or polishing disks (Fig. 2). Patient was instructed regarding proper tooth brushing and oral hygiene to ensure maintenance. This treatment rendered an acceptable and pleasing appearance of gingiva.



Fig. 1: Pre-operative



Fig. 2: Post-operative

Discussion

There are various treatment modalities available for correction of gingival recession, ranging from surgical to orthodontic or by prosthetic management.⁽⁴⁾ In surgical management of gingival recession the

techniques are sensitive and require extensive treatment, especially when the defect is extensive involving multiple teeth. Also surgical procedures require a prolonged healing time, may not produce a predictable result, and also some patients may not opt for the invasive procedure. Hence, in such cases a prosthetic management with a gingival masking technique can be the best option. Different methods have been described in the literature for the fabrication of gingival veneer prosthesis.^(5,6) In this case report, gingival composite material has been tried for fabrication. This is an easy technique to achieve esthetics and is less time consuming.⁽⁷⁾ Advantages of this technique are:

- It is highly esthetic chairside composite restorative procedure which can be adapted to a large variety of gingival colors.
- One basic color and a mixable opaquer can reproduce almost all gingiva colors.
- Cervical areas exposed after gingival recession and cervical V-shaped defects can be restored esthetically and functionally.
- It is an advanced composite technique.
- It provides gingival colors for highly esthetic restorations beyond the gingival margin.

The patient should be advised for good plaque control and maintenance of the prosthesis. A disadvantage of this technique can be that it may require a change of prosthesis due to color instability after a period of time.

Conclusion

The use of gingival composite in this case produced successful results with good patient satisfaction. This technique is relatively simple, minimal-invasive and esthetically pleasing. Thus, gingival composite procedures can be recommended to preserve the natural esthetics, as much as possible.

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