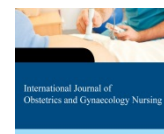




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A CASE REPORTING PORCELAIN LAMINATE VENEER ON A HIGHLY DISCOLORED TOOTH IN A 47 YEAR OLD FEMALE PATIENT

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ABSTRACT

Esthetic treatment of a single darkened tooth represents a great challenge to the dental practitioner. A case of restoration of a single highly darkened anterior tooth with a feldspathic porcelain veneer is mentioned. Conservative use of porcelain laminate veneers provides satisfactory esthetic outcomes and preserves sound tooth structure. The patient was very satisfied with the result and had no post operative complication.

Keywords: Porcelain, Laminated, Veneer, Bleaching etc.

INTRODUCTION

Porcelain Laminate Veneer is used widely throughout the world for esthetic correction for discolored and damaged tooth structures even in case of a single discolored tooth [1, 2]. Esthetic treatment of a single discolored anterior tooth presents a challenge in clinical practice. Laminates are used widely after bleaching for treating discolored and damaged tooth throughout the world as it mask or reduce the discoloration and can reproduce the characteristics of the tooth structure [3, 4]. The biomimetic characteristics of ceramic laminate veneers allow them to behave similarly to natural teeth in terms of strain and stress transference. A case of restoration of a single highly darkened anterior tooth with a feldspathic porcelain veneer is discussed [5].

CASE REPORT

A 47 year old female complained about the darkness of her mandibular lateral incisor. The severe discoloration of the tooth limited esthetic resolution using direct and conservative techniques like dental bleaching and restoration with composite resin veneer. So a porcelain laminate veneer was chosen to correct position and colour mismatch.

METHOD

The patient had endodontic treatment of the tooth and improper filling cement inside the pulp chamber had caused the severe discoloration. The pulp was restored accordingly to correct it. Tooth was prepared by use of bur. The veneer was fabricated with a feldspathic porcelain material based on a refractory die system, following the manufacturer's recommendations. After carefully checking the proximal contacts, shade match, contour and marginal adaptation, luting was performed. A gingival retraction cord was used to prevent contamination by gingival fluid. After cleaning, the tooth surface was etched for 20 seconds with 37% phosphoric acid then rinsed for 20 seconds. Excess water was removed with absorbent paper, and an adhesive system was applied to the prepared surface. At the same time, the ceramic veneer was etched for 2 minutes with 10% hydrofluoric acid washed with water and dried. Finally dual cement was



placed on the internal veneer surface and the veneer was placed on the prepared tooth and pressed lightly with the fingers. Excess inter-proximal cement was removed with a micro-brush and dental floss. The veneer was covered with a glycerin gel as an oxygen barrier to ensure better polymerization of the resin cement and then light polymerization was carried out on both surfaces for 120 seconds. After the margins were finished and polished, occlusion was checked and no adjustments were needed. The patient was monitored clinically for few days. During that time, the marginal integrity of the restoration was maintained and no inflammation was observed in the gingival margin. The restorative treatment remained esthetically acceptable throughout.

DISCUSSION

A veneer is a thin layer of restorative material placed over a tooth surface either to improve the aesthetics of a tooth or to protect a damaged tooth surface [6]. The use of veneers for instant orthodontics or simulated straightening of the teeth is harmful, especially for younger people with healthy teeth so it is contraindicated in these cases. Veneers are an important tool for the cosmetic dentist [7, 8]. A dentist may use one veneer to

restore a single tooth or multiple veneers for multiple teeth that may have been fractured or discolored. Many people have small teeth resulting in spaces that may not be easily closed by orthodontics [9]. Some people have worn away the edges of their teeth resulting in a prematurely aged appearance, while others may have mal-positioned teeth that appear crooked. Multiple veneers can close these spaces, lengthen teeth that have been shortened by wear, fill the black triangles between teeth caused by gum recession, provide a uniform color, shape and symmetry and make the teeth appear straight [10].

CONCLUSION

Porcelain laminated veneers are most widely used in the world for correction of highly discolored tooth where composite cannot be used. Porcelain veneers are useful adjuncts to dentist armamentaria and they help in the management of esthetic problems, minimizing dental tissue reduction. These are good looking in appearance and also cover up for the damaged or discolored tooth. They not only require the dentist to pay close attention to detail throughout the whole clinical procedure but also impart a good esthetic result for the patient.

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