
CASE REPORT

Gingival prosthesis: A case report

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ABSTRACT

A delightful smile can open the doors and whack down obstacles that stand between you and a fuller richer life'. Though, not all the attractive people were born that way. Many have taken the benefit of plastic surgery as well as cosmetic surgery. The synchronization of the smile is determined not only by shape, position and colour of tooth but also by

the gingival tissues. Gingival tissues often experience pathologic changes leading to gingival recession, black triangles. Sometimes management of gingival recession can be managed surgically whereas severe and extensive recession in multiple teeth can be managed non-surgically with a gingival prosthesis. Here is a case report in which a removable gingival prosthesis was used.

Key Words: *Gingival Recession; Gingival Tissues; Gingival Prosthesis; Periodontal Disease*

INTRODUCTION

Advanced destruction of the periodontium, like gingival recession, which is apical migration of the gingival tissues resulting in exposure of the underlying root surface, leads to significant compromise of dental aesthetics, as this condition results in the formation of a black triangle and tooth sensitivity [1]. In phonetics and aesthetics, gingival tissue (soft tissue) is very essential [2].

Various periodontal surgical treatments can be taken into consideration for gingival recession, like surgical root coverage treatment, which might be inefficient in severe cases of gingival recession. As a result, a flexible or non-flexible, the removable gingival prosthesis is being considered as a promising, conservative, and cost-effective solution [3].

A gingival prosthesis (also called as a gingival mask, gingival veneer or gingival epithesis) is formed with materials that include pink auto-cure and heat-cured acrylic, porcelain, composite resins, thermoplastic acrylic and soft material-based silicone in a traditional technique [4].

Indications for gingival prosthesis are [5]:

1. Periodontal disease or post-periodontal therapy causes gingival recession.
2. Provisional restoration for aesthetic purposes.
3. Gingival augmentation for implant-supported prosthesis.
4. Gingival recession due to proclination of anterior teeth

CASE REPORT

A 63-year-old woman with receding gums, discomfort, and an aesthetic issue. Another major problem was food lodgement in the maxillary anterior region. As no periodontal intervention was possible the goal was to create a flexible gingival prosthesis. A diagnostic impression was taken with alginate material for the gingival prosthesis. The impression was obtained with Type III dental stone. To block the undercuts, a wax mock-up was prepared using modelling wax. After that, flasking was done for the wax pattern. Once the flasking was complete, dewaxing was done. Gingival prosthesis pattern which was made from the wax and was now replaced by Monosil soft liner material. This prosthesis was then removed after one hour with the trimming of all excess material was done using sharp surgical scissor. The luster was applied according to the manufacturer's instructions. Retention as well as the aesthetics was achieved through this gingival prosthesis Figure 1-6.



Figure 1) Pre-operative



Figure 2) Post-operative

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Figure 3) Wax mock-up



Figure 4) Flasking



Figure 5) Pre-operative without prosthesis



Figure 6) Post-operative with prosthesis

DISCUSSION

Periodontitis (also referred to as "gum disease") causes the bone and supporting tissues that support the teeth in place to weaken [6]. In many cases, this results in the creation of deep gum tissues, which can result in gingival/gum recession. However, successful chronic periodontitis therapy typically results in gum recession [7]. The degree of the recession is proportional to the severity of the disease and the extent of underlying bone loss. The outcome of a recession might be unsightly. There is currently no surgical method that can be used to treat aesthetic problems caused by generalized attachment loss. The only way to improve the appearance is to hide the tissue loss, which is particularly critical in cases of extensive recession [8]. In clinical scenarios when the substantial gingival recession causes aesthetic problems, the gingival prosthesis is a potential treatment option for restoring anterior aesthetics. For a predictable and successful conclusion, case selection is critical [9]. Gingival prostheses come in a variety of shapes and sizes, and numerous authors have discussed their functions and building processes [10]. Pink auto-cured and heat-cured acrylics, porcelain, composite resins, and thermoplastic acrylics, as well as silicone-based soft materials, can all be used to form a gingival prosthesis [11]. Greene PR proposed two-stage impression processes for creating two identical masks in 1998. Two masks are used on consecutive days. Brygider described precision [12], attachment to keep gingival acrylic veneers for fixed implant prosthesis in 1991. On alternate days, two masks are utilized [4].

Precision attachment maintained gingival acrylic veneers for fixed implant prosthesis, which was described by Brygider in 1991. A study conducted in 2003, by Barzilay and Irene described various approaches for fabricating gingival prostheses using pink materials [13]. In research reported in 2003, Lai et al. began to look at the colour stability, stain resistance and water sorption of four removable gingival flange materials in vitro and found that gingival flanges made of silicone or co-polyamide materials were more susceptible to staining with coffee and tea than conventional denture base acrylic resins [14]. A considerable amount of gingival tissue is replaced by the gingival prosthesis and widespread attachment loss as a result of periodontal disease is a type of gum disease that affects the teeth. The gingival prosthesis can be made of various materials as well as it is simple to maintain and has a pleasing appearance [15].

CONCLUSION

Periodontal disease leads to gingival recession, which causes lack of self-esteem of patients, mainly in the maxillary anterior region. A dental prosthesis includes both the "white component" and the "pink component" of the restoration. A thorough understanding of colour and form is required when designing a prosthesis for the best practical and aesthetic benefits. Removable gingival prosthesis is a good treatment modality for patients with generalised recessions due to horizontal bone loss to achieve good aesthetics. A gingival prosthesis is a cost-effective and patient-satisfying solution for recreating the natural appearance of the gingiva in a predictable manner.

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