

## “Characterized Provisional Restorations In F P D.”

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### Abstract

Provisional restorations are essential part of fixed partial dentures, they are placed after the tooth preparation till the final prosthesis are fabricated. It helps in pulpal protection, stable position, occlusal function, cleansability, strength, retention and esthetics. In FPD treatment for missing anterior teeth, esthetics of the provisional restoration is the matter of concern. Fabrication of temporary restoration was made using matrix by indirect method using tooth color self cure acrylic resin. Simple method of staining provisional restoration was carried to provide best esthetics. Provisional restoration is colored with the help of color pencils and the surface is protected with bonding agent subsequently or using intrinsic acrylic pigments that was mixed with acrylic material.

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### I. Introduction

Interim restorations play a vital role in fixed partial denture treatment. They are necessary to protect prepared teeth and maintain function and aesthetics during the period between tooth preparation and the placement of the final prosthesis.<sup>[1]</sup> The term "provisional prosthesis" is frequently used interchangeably with interim prosthesis.<sup>[2]</sup> In FPD treatment the provisional / temporary restoration helps in, stable positioning and pulpal protection of prepared tooth. It should also provide mastication, cleansability, strength, retention and esthetics. FPD treatment in anterior missing teeth, esthetics of the provisional restoration is the matter of concern.<sup>[3]</sup> Coloring the provisional restoration provides best esthetics, builds social well being of the patients and gives an idea of the final restoration to the clinician.

### II. Technique

Patient with missing teeth in lower anterior region(fig-1).Fabrication of temporary restoration was made using matrix method.<sup>[1]</sup> wax pattern was fabricated (fig-2)and self cure tooth molding acrylic resin was used for making temporaries by indirect method to get accurate fit and prevent any possible pulpal damages. <sup>[4]</sup>

Acrylic tooth of suitable size and shape was placed in edentulous area of the diagnostic cast made before tooth preparation and wax was built in places of tooth and gingival insufficiency then matrix was made using poly vinyl siloxane putty. After tooth preparation, impression was made and master cast was poured .The obtained cast was coated with two layers of separating medium. Tooth color acrylic resin is mixed and loaded into the matrix prepared. The loaded matrix was then pressed against the cast with tooth preparation, check for complete seating and proper alignment of cast with matrix, wait till the material set. Excess material was trimmed and fitting was checked in patients mouth. Later, required corrections were made.

The labial surface and interproximal area of the provisional restoration is colored with the help of color pencils and it is checked in the patients mouth. Required color modifications were done.

The surface was coated with 2 layers of bonding agent using simple paint brush without disturbing the color and was light cured subsequently or it is coated with the medical graded cyanoacrylate glue or the provisional restoration can be stained using the intrinsic acrylic pigments which is mixed with the acrylic material and applied to the desired area using a camel hair brush. The stained or characterized provisional restoration was ready for temporary cementation and was cemented in patients mouth(fig-3).

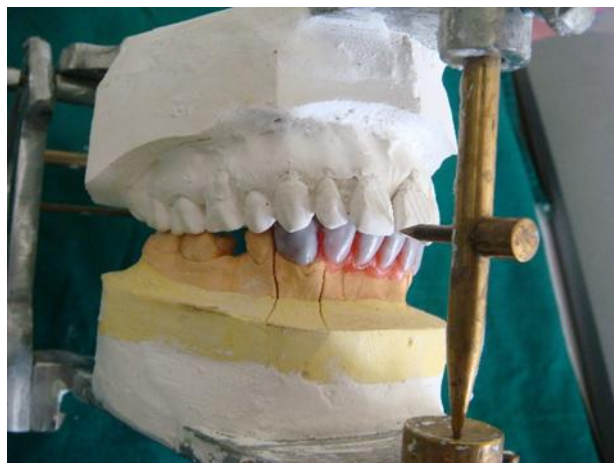
Implant-supported provisional restorations serve multiple important purposes. In the anterior region, they are particularly useful for evaluating and refining the optimal restorative design, helping to ensure the final prosthesis is both functional and esthetically appropriate. They also provide a template around which soft tissue contours may be evaluated and manipulated. In areas where bone quality is compromised and implant success is suspect, whether it be anteriorly or posteriorly, implant-supported provisional restorations may be used to "test"

the osseointegration prior to fabricating and placing the definitive restorations.<sup>[5]</sup>Provisional restorations are placed at the time of implant surgery or after an appropriate healing period.<sup>[6]</sup>

A noticeable difference has been noticed not only in the esthetic appearance of the patient but in the confidence of the patient. It was helpful to reduce the mental trauma due of the edentulousness period till the final prosthesis has been cemented.



***Fig1: Pre-operative Image***



***Fig2: Wax Pattern Fabricated***



***Fig3: Provisional Restoration***

### **III. Advantages**

- Simple method
- Builds patient's confidence and
- They also allow the clinician to insert and assess a preliminary version of the final restoration within the patient's oral cavity.

### **IV. Indications**

- In all situations where esthetics is a concern.
- The esthetic expectations for size, position, contour and color in relation to the adjacent teeth, lips, complexion and patient satisfaction is .<sup>[7,8,9]</sup>
- It aids in evaluating whether the proposed prosthodontic treatment effectively meets the patient's specific needs and expectations.

### **V. Uses**

- Crowns are placed on root canal treated teeth to preserve the biological seal and prevent coronal microleakage.<sup>[10]</sup>
- Replacement of one or more missing anterior teeth.
- Full mouth rehabilitation.
- Implant supported crowns.

### **VI. Conclusion**

The requirements for interim restorations are largely similar to those of definitive restorations, differing primarily in terms of durability and, to some extent, color complexity. Interim restorations function as both esthetic and functional trial versions, serving as a blueprint for the final prosthesis design. This process helps the clinician and technician gain a clearer understanding of the intended outcome and allows for patient feedback and approval before finalizing treatment. Therefore, the esthetic outcome of both fixed and implant-supported prostheses often relies heavily on the precision with which the provisional restoration is planned and fabricated. When contour and shade are carefully managed, provisional restorations can achieve a highly acceptable, and in many cases, excellent appearance.

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