

A MINI-TRANSITIONAL IMPLANT SUPPORTED PRECISION-MILLED BAR OVERDENTURE

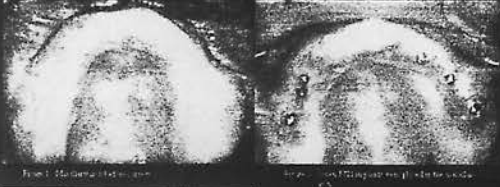
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Introduction

Overdentures have been used for many years. The traditional design of an overdenture is a complete denture with a metal framework that is supported by natural teeth or implants. The purpose of this study was to evaluate the use of a precision-milled bar as a framework for a mini-transitional implant supported overdenture.

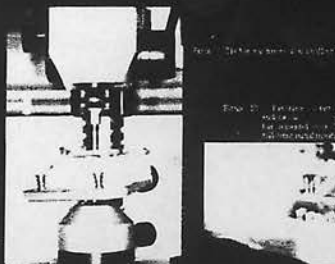


Discussion

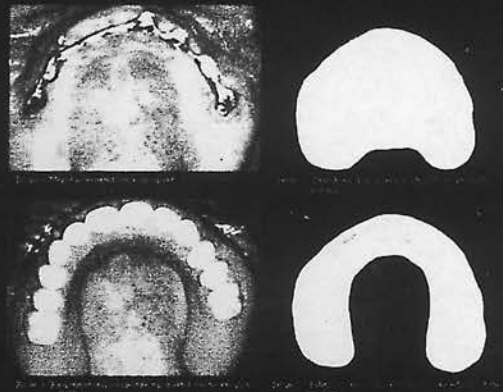
The purpose of this study was to evaluate the use of a precision-milled bar as a framework for a mini-transitional implant supported overdenture. The results of this study show that the use of a precision-milled bar as a framework for a mini-transitional implant supported overdenture is a viable option. The use of a precision-milled bar as a framework for a mini-transitional implant supported overdenture has several advantages: (1) Providing protected healing of submerged implants, (2) Cross arch stabilization, rigidity, stability, and superior retention of the overdenture, (3) Maintaining vertical dimension of occlusion (VDO), (4) Allowing patient to preserve function, phonetics, and esthetics shortly after implant surgery, (5) Palatal coverage of the denture is eliminated, improving comfort, taste, and reduction of potential "gag" reflex, and (6) Ease of Oral Hygiene.

Precision-Milled Bar Technique

- Step 1: Preparation of the wax pattern of the precision-milled bar.
- Step 2: Investment of the wax pattern in a precision-milled bar investment.
- Step 3: Casting the precision-milled bar in a precision-milled bar investment.
- Step 4: Finishing the precision-milled bar in a precision-milled bar investment.
- Step 5: Polishing the precision-milled bar in a precision-milled bar investment.
- Step 6: Removing the precision-milled bar from the precision-milled bar investment.
- Step 7: Inspecting the precision-milled bar for accuracy and fit.
- Step 8: Cementing the precision-milled bar to the implants.
- Step 9: Finishing the precision-milled bar to the final shape.
- Step 10: Cementing the precision-milled bar to the implants.



Result



Conclusion

The use of a precision-milled bar as a framework for a mini-transitional implant supported overdenture is a viable option. The use of a precision-milled bar as a framework for a mini-transitional implant supported overdenture has several advantages: (1) Providing protected healing of submerged implants, (2) Cross arch stabilization, rigidity, stability, and superior retention of the overdenture, (3) Maintaining vertical dimension of occlusion (VDO), (4) Allowing patient to preserve function, phonetics, and esthetics shortly after implant surgery, (5) Palatal coverage of the denture is eliminated, improving comfort, taste, and reduction of potential "gag" reflex, and (6) Ease of Oral Hygiene.

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ABSTRACT

A patient presented with edentulous maxilla and partially edentulous mandible was treatment planned to receive implant-supported fixed partial dentures. The patient was diagnosed with bone quality 2 and bone shape A according to Branemark's classification. The favorable combination of good quality, shape, width, and height of bone allowed us to place 8 Nobel Biocare endosseous implants and 7 Mini-Transitional Implants (MTI) from Dentatus.USA in the maxilla. A modified restorative technique is presented here for the transitional overdenture. A precision-milled bar was prepared as the framework to support the overdenture. This prosthesis has the following advantages: (1) Providing protected healing of submerged implants, (2) Cross arch stabilization, rigidity, stability, and superior retention of the overdenture, (3) Maintaining vertical dimension of occlusion (VDO), (4) Allowing patient to preserve function, phonetics, and esthetics shortly after implant surgery, (5) Palatal coverage of the denture is eliminated, improving comfort, taste, and reduction of potential "gag" reflex, and (6) Ease of Oral Hygiene.