



Titanium Base Protection: An Additional Use for PTFE

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INTRODUCTION

Polytetrafluoroethylene (PTFE) has been utilized in multiple applications in dental offices for many years. These applications include being used as a barrier material, interdental separator in adhesive dentistry, sealing of screw access channels, stamping in direct restorative procedures, and pulpal access in multi-step RCT procedures.^[1,2,3] The purpose of this article is to present a new technique using PTFE to protect titanium bases during finishing and polishing of fixed prosthetics.

PURPOSE

Finishing and polishing the intaglio surface of the interim fixed complete dental prosthesis may result in scratching and damaging the titanium cylinders. This can be caused when attempting to contour the surface to aid in cleansability. Removal of the excess resin after denture conversion is also essential in order to allow complete seating of the prosthesis on the implant abutments. Damaging the cylinders may result in increased plaque accumulation as well as soft tissue inflammation.^[4]

While there are products that help in protecting the titanium cylinders, such as the Bidra® Low Profile Conversion Smart Polishing Cap PreatCorp,^[4,5,6] PTFE can be used as an affordable and easily accessible alternative.

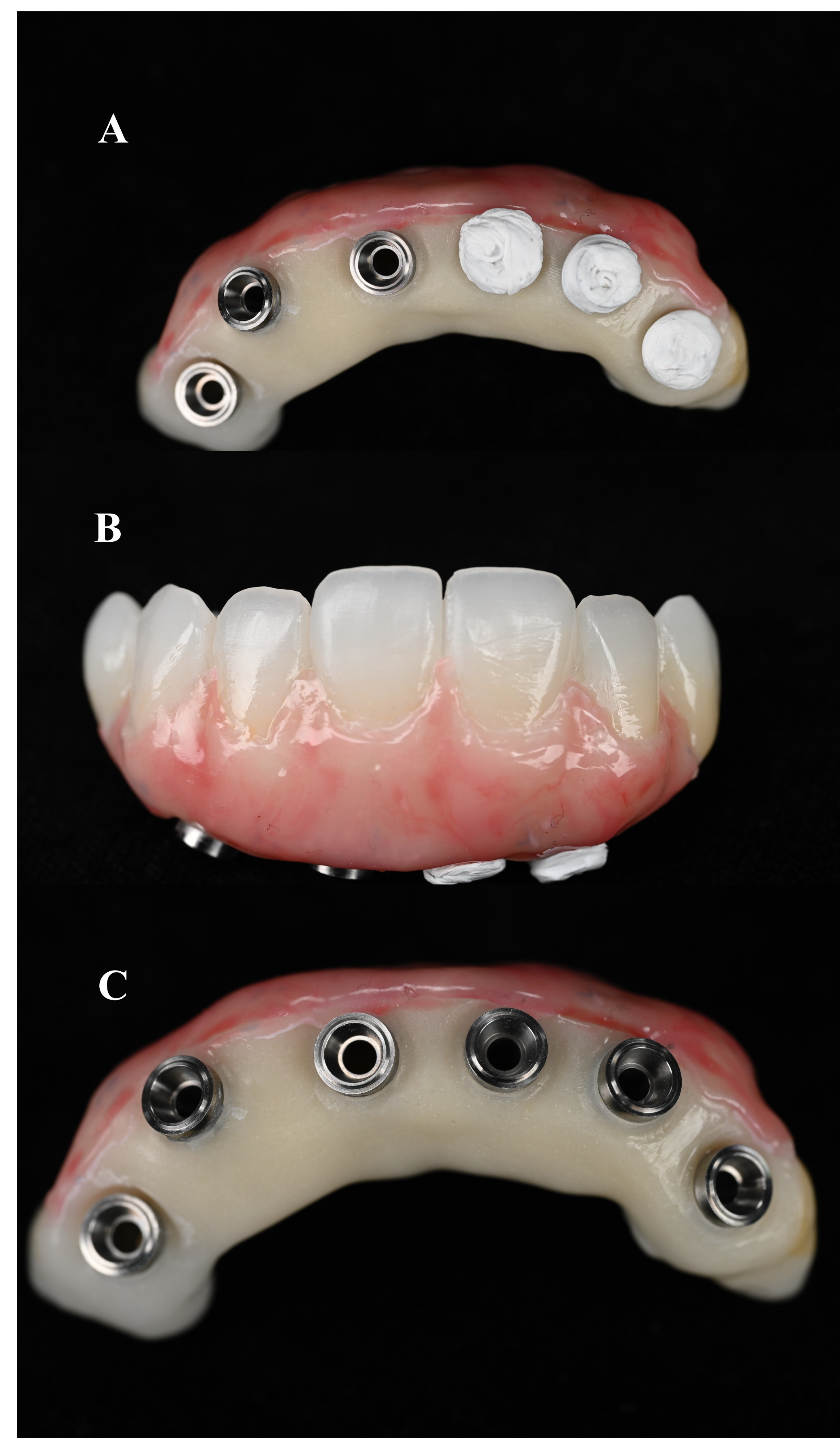


Fig A - Prototype prosthesis with PTFE barrier, Intaglio view

Fig B - Prototype prosthesis with PTFE barrier, Facial view

Fig C - Prototype prosthesis, Intaglio view

TECHNIQUE

1. Cut approximately a 3-inch piece of PTFE
2. Twist one end of the PTFE into a cord
3. Place the cord into the cylinder screw channel
4. Wrap the remaining strip around the metal collar
5. Finish and polish the prosthesis with caution around the areas with PTFE

CONCLUSION

The described technique can be considered a useful method to finish and polish the interim fixed complete dental prosthesis. PTFE is easily accessible, inexpensive, and easy to use. The PTFE barrier protects the titanium cylinders from damage and subsequently ensures proper fit and reduced plaque buildup.

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