

# Modified TPA-supported removable pontic

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## Abstract

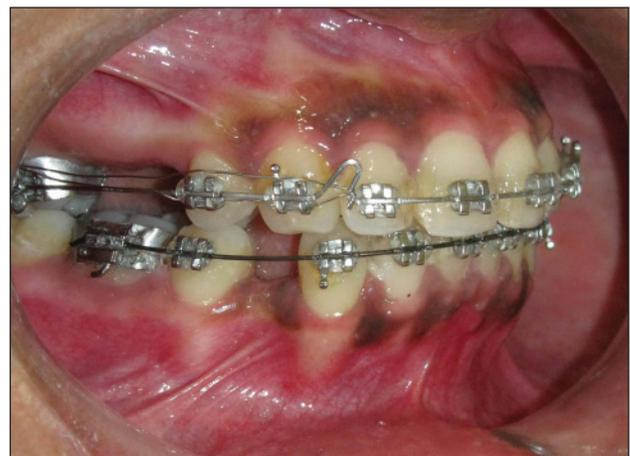
Missing posterior teeth or necessary asymmetric orthodontic extraction may lead to migration, tilting of the adjacent teeth, and supra-eruption of the opposing teeth along with compromised esthetics. The modified TPA supported removable pontic acts as an esthetic pontic during orthodontic space closure.

**Key words:** Orthodontics, removable pontic, unesthetic extraction space

## INTRODUCTION

In the past three decades, a major reorientation of orthodontic thinking has occurred regarding adult patients. Most adults seek orthodontic treatment either to improve esthetics or to improve occlusal function.<sup>[1]</sup> There are several factors responsible for the increased interest by adults in orthodontic treatment, including availability of a variety of cosmetic appliances and an increased desire for treatment of dental mutilation problems using tooth movement and fixed restorations rather than removable prostheses.<sup>[2]</sup> Missing posterior teeth or necessary asymmetric orthodontic extraction may lead to migration, tilting of the adjacent teeth, and supra-eruption of the opposing teeth along with compromised esthetics [Figures 1 and 2]. This may contribute to disruption of the occlusion which makes orthodontic tooth movement more difficult. Here, we have designed a removable pontic with modified TPA. It is very simple and easy to fabricate and can be useful in daily adult orthodontic practice. It acts as an esthetic pontic requiring no bracket attachment. Advantages include ease of maintaining oral

hygiene, providing controlled anchorage, and preventing supra-eruption of opposing teeth. Acrylic extension of removable appliances over the palatal surfaces of anterior teeth require regular trimming of acrylic for retraction, compromising the retention while during retraction, modified TPA-supported pontic can be trimmed without affecting esthetics and retention. The modified TPA with pontic is a removable appliance. It gains retention by the slightly expanded flexible TPA which is compressed while inserting in the mouth. Secondary retention is gained by the snug fit with adjacent teeth. It can be used unilaterally as the expanded TPA and the acrylic extension over the interdental area of opposite side posterior teeth helps in holding the appliance in place.



**Figure 1:** Unesthetic extraction space visible in buccal view during anterior retraction

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**Figure 2:** Maxillary occlusal view



**Figure 3:** Buccal view showing removable pontic in the extraction space



**Figure 4:** Maxillary occlusal view showing the Modified TPA-supported removable pontic

#### Steps for fabrication

1. Armamentarium: 20-gauge, round TMA wire for TPA (to increase flexibility and springiness), cold cure acrylic and acrylic teeth.

2. Modified TPA is fabricated 1 mm away from palatal surface and 2-3 mm below the gingival margin of both sides.
3. Select acrylic teeth of proper size and shape as pontic.
4. Stabilize TPA and pontic on the cast, followed by acrylization with the acrylic extension 4-5 mm below the gingival margin.
5. Finally, trimming and polishing is done.
6. Insertion of the Modified TPA-supported removable pontic in the unesthetic extraction space [Figures 3 and 4].

#### REFERENCES

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