

Periodontal Compromised Cases: The Patience and Perseverance That Bears the Fruit

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Abstract

Orthodontic treatment in periodontally compromised cases is quite challenging as it involves a thorough understanding of the periodontium keeping given the compromising factors. Bone health plays a pivotal role in patients opting for orthodontic treatment. Here, we are presenting a case series of periodontally compromised patients being treated Orthodontically.

Keywords: *Orthodontics, periodontics, compromised.*

Introduction

Case-1: A 28 years old female patient came to our dental office with a chief complaint of large gaps between teeth and bad smile. She had a very shy and conscious smile due to obvious reasons. Reasons for Orthodontic treatment was primarily esthetics. She was found to have Angle's Class I malocclusion on skeletal class I jaw bases, with anterior spacing, severe periodontal destruction in maxillary and mandibular jaws.

Treatment plan: The patient had undergone a non-extraction line of treatment, leveling and alignment, maxillary space closure, followed by bijaw, lifetime bonded lingual retainers in the anterior region (4 to 4) creating anesthetic smile. Figure. 1 depicts the patient's pre and post-treatment extraoral comparisons and Figure. 2 shows the intraoral changes before and post Orthodontic treatment.



PRE POST COMPARISON

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Figure 1: Pre and post-treatment comparison (extraoral)

PRE POST COMPARISON



Figure 2. Pre And Post Treatment Comparison (Intraoral)

Case-2: A 58yrs old female patient met us in the Orthodontic set up with the chief complaint of gaps between front teeth, which was making her smile uncomfortable. Reasons for Orthodontic treatment was primarily esthetics. Her doctor son's marriage was scheduled after 1 yr. she wanted to have good confident smiling photographs in the marriage album. She had Angle's Class I malocclusion on skeletal class I jaw bases, with anterior spacing, with grave periodontal destruction in maxillary and mandibular jaws.

Treatment Plan: It was planned to do non-extraction treatment, leveling and alignment, maxillary and mandibular space closure, followed by long term bonded lingual retainers in anterior region (4 to 4) of both the jaws, creating an confident photogenic smile. The pretreatment, mid-treatment, and post-treatment pictures are presented in Figure 3.

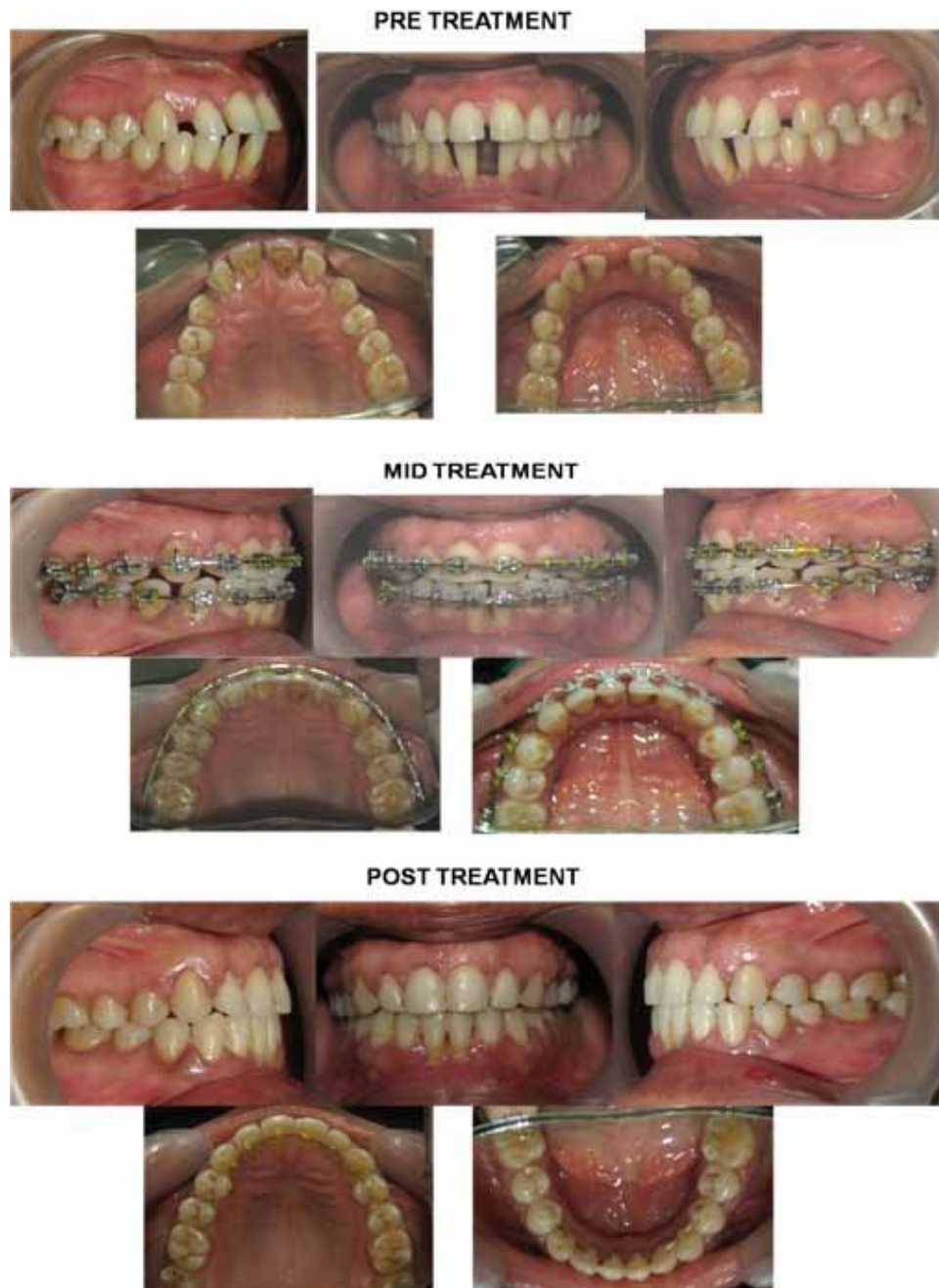


Figure 3. Pretreatment, Midtreatment, Posttreatment Comparisons

Case-3: A 35-year-old female patient had chief complaints of forwardly placed upper front teeth with gaps in between. The patient wanted a better smile as she was pursuing marriage. She had a convex profile, acute nasolabial angle, Liptrap, deep mentolabialsulcus, and Orthognathic face. She had Class- II malocclusion on a Class-I skeletal jaw base with increased overjet, overbite, Trauma from occlusion, spacing in upper anterior, crowding in lower anterior, increased curve of spee and harsh periodontal condition in both the jaws.

Treatment Plan: It was planned to do the upper first premolar (14, 24 extraction), leveling, alignment, maxillary retraction with maximum anchorage, finishing in good overjet, overbite, Class-II molars & Class-I canines bilaterally, resulting a pleasant noteworthy smile. Retainers planned were long term bonded lingual retainers for both the jaws. The pretreatment pictures are depicted in Figure 4. The post-treatment pictures are presented subsequently in Figure.5.



Figure 4. Pretreatment View



Figure 5. Post-treatment view

Conclusion

All these above three cases were adults with a primary concern of esthetics.^{1,2} The patients were not worried about the underlying periodontal destruction. The key to our success in these cases are: the first and foremost objective was to make the patients aware of periodontal issue and a change in their attitude. It was of paramount importance to improve their oral hygiene habit to a more acceptable level by positive motivation and periodic oral prophylaxis. This was inevitable for a successful treatment and avoidance of relapse in the long term.^{3,4} Repeated reminders to behavioral change

and periodic periodontal evaluation was continued throughout the treatment as well as post-treatment. The non-extraction cases were treated with moving the teeth towards the midline so that the tongue space won't be impinged, which shall be detrimental with the already compromised periodontium, during the retention phase. Light forces with longer periods (6wks) of activation interval.⁵ Self motivation of all the patients. Without their contribution in the form of persistent oral hygiene maintenance the results were unfeasible.

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