

Managing Unhappy Patients with Compromised Upper Anterior Teeth: A Case Report on Successful Periodontal Regenerative Therapy

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Received: 14 Feb 2025

Accepted: 24 Feb 2025

Published: 28 Feb 2025

J Short Name: ACMCR

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Citation:

Ahmad Soolari, Managing Unhappy Patients with Compromised Upper Anterior Teeth: A Case Report on Successful Periodontal Regenerative Therapy. *Ann Clin Med Case Rep*® 2025; V14(11): 1-3

1. Introduction

The anterior teeth play a crucial role in esthetics and function. Patients seeking treatment for compromised upper anterior teeth often present with complex challenges, including attachment loss, bone loss, and gingival recession. [1] Traditional treatment approaches for such cases may involve extractions followed by implant placement or fixed partial dentures [2]. While these options can restore function and esthetics, they also come with inherent risks, costs, and potential complications [3]. Periodontal Regenerative Therapy (PRT) offers a biologically sound alternative, aiming to regenerate lost periodontal structures and preserve natural teeth [4]. This case report presents the successful application of PRT in a patient dissatisfied with the appearance of his upper anterior teeth after prior unsuccessful conventional periodontal therapy.

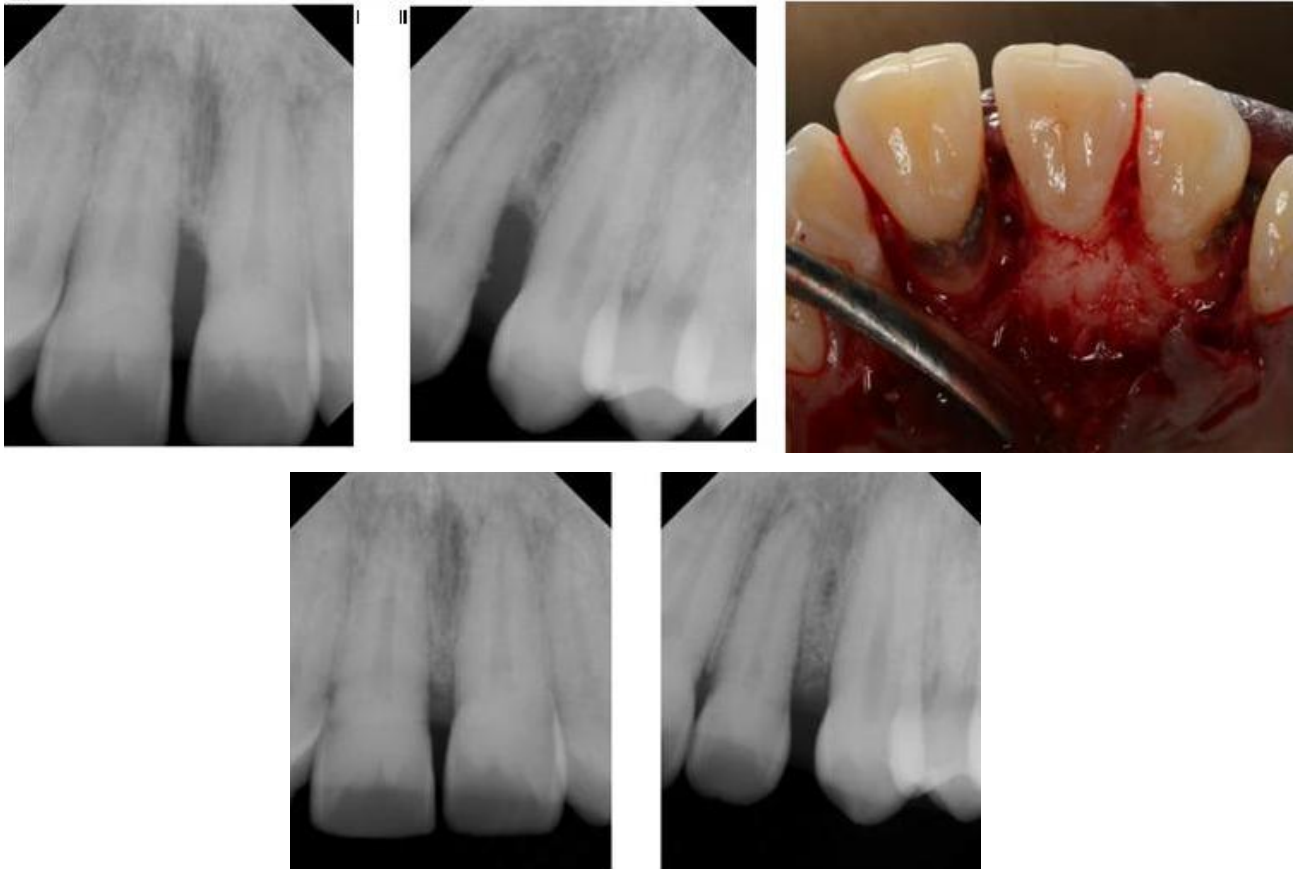
2. Case Presentation

A 37-year-old African American male presented with concerns about the esthetic appearance of his upper front teeth. He reported having undergone several non-surgical periodontal treatments at another dental office, including LASER therapy, water pick usage, Arrestin administration, scaling and root planing, and "soft tissue management." Despite these interventions, his condition did not

improve, and extraction of teeth #8 and 10 followed by implant placement was recommended. The patient declined this treatment option and sought a second opinion. Clinical examination revealed generalized gingival inflammation, localized attachment loss, and minor bone loss around teeth #8 and 10. The patient expressed a strong desire to retain his natural teeth. After a thorough discussion of treatment options, including the risks and benefits of each, the patient opted for PRT.

3. Treatment Plan and Procedure

The treatment plan consisted of meticulous scaling and root planing, followed by the application of a regenerative material [5]. Local anesthesia was administered, and full-thickness flaps were reflected to access the affected root surfaces. Granulation tissue was thoroughly removed, and the root surfaces were conditioned [6]. A bone replacement graft material was placed in the bony defects, and a collagen membrane was used to cover the graft and promote guided tissue regeneration [7]. The flaps were then sutured back into their original position. Post-operative instructions included meticulous oral hygiene practices, chlorhexidine rinses, and a soft diet. The patient was seen for follow-up appointments at 1 week, 2 weeks, 4 weeks, 3 months, 6 months, 1 year, 2 years and 3 years.



3 Year Post Tx Radiograph of Teeth # 8 and 10.



Before Treatment.



Three years later

4. Results

The patient exhibited excellent compliance with post-operative instructions. Healing was uneventful, with significant improvement in gingival inflammation and probing depths observed at the 3 years follow-up. Radiographic evaluation at 3 years revealed evidence of bone regeneration in the previously noted defects [8]. At the 3-year mark, the patient reported high satisfaction with the esthetic outcome. The clinical examination demonstrated stable attachment levels and healthy gingival tissues. Three years post- treatment,

the patient continues to exhibit excellent clinical parameters and is extremely pleased with the results. He expressed gratitude for the preservation of his natural teeth and the significant cost savings achieved by avoiding implant placement.

5. Discussion

This case highlights the potential of PRT as a viable alternative to extraction and implant placement in select cases of compromised anterior teeth. The patient's initial dissatisfaction with the outcome

of conventional periodontal therapy underscores the importance of comprehensive diagnosis and treatment planning [9]. PRT, by focusing on regeneration of lost periodontal structures, offers a more conservative and biologically sound approach compared to more invasive procedures [10]. The long-term success of this case, evidenced by stable clinical parameters and patient satisfaction at the 3-year follow-up, demonstrates the durability of PRT outcomes. Furthermore, the cost-effectiveness of PRT compared to implant placement makes it an attractive option for patients seeking to preserve their natural teeth [11].

6. Conclusion

This case report demonstrates the successful application of PRT in a patient with compromised upper anterior teeth. The treatment resulted in significant clinical improvement, patient satisfaction, and cost savings. PRT should be considered as a viable treatment option for patients seeking to preserve their natural teeth and avoid more invasive procedures like extractions and implants.

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