A multidisciplinary approach to recreate an esthetic smile

Munerah Binshabib1 and Nawal Alharbi2
1Princess Nora bint Abdul Rahman University, KSA
2King Saud University, KSA

Introduction: Esthetic is a primary factor to consider when treating the anterior teeth. An increased demand from the population is toward a youthful healthy and functional smile. Often a Multidisciplinary approach is the key to manage such cases successfully.

Aim: The aim of this poster was to describe management of a patient with compromised esthetics via a Multidisciplinary approach.

Case study: The case study begins with 35-year-old female Saudi patient presented to our clinic complaining of short teeth and unaesthetic smile. The patient did not have any medical problems. Her past dental history included multiple substandard restorations and root canal treatments.

Diagnosis: Abraded occlusion presenting with Short tooth syndrome and Loss of vertical dimension.

Objectives: The objectives of the treatment were to eliminate etiologic factors motivate the patient to improve her oral hygiene. A multidisciplinary approach was oriented toward achieving functional and esthetic rehabilitation of the affected teeth, correct the occlusal scheme and to restore the patient's smile.

Treatment procedure: The treatment was carried out in four treatment phases:

Phase I: Control phase: Includes: Impression for study model to evaluate the occlusion and make diagnostic wax up, radiographs and different extra oral and intraoral photographs. Caries control including excavation of all carious lesions, scaling and root planning, fluoride application and meticulous oral hygiene instructions.

Phase II: Re-evaluation phase: Patient was highly motivated and was maintaining good oral hygiene.

Phase III: Definitive Treatment plan: Diagnostic wax up and radiographs showed that reason of the short teeth was due to incisal edge abrasion rather than altered passive eruption. The Decision was to increase the vertical dimension by increasing the incisal edge by 2mm using full arch temporization for one year to stabilize the new vertical dimension. The lower anterior teeth underwent crown lengthening procedure to increase the length of clinical crowns for esthetic and functional purposes.

Phase IV: Maintenance phase: Schedule every three to six months

Treatment Outcome: The patient appreciated the result and she is happy with her new smile. The long-term Prognosis requires maintenance of oral hygiene.

Conclusion: Management of compromised esthetics requires careful multidisciplinary treatment planning to achieve predictable results. The etiology of short teeth was carefully evaluated and with proper diagnostic waxup led to avoiding unnecessary esthetic crown lengthening in the upper anterior teeth and compensating with surgical crown lengthening of the lower anterior teeth only.

dr.munirah.ss@gmail.com