



CLASS 2 SKELETAL PATTERN TREATED WITH TWIN BLOCK APPLIANCE



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INTRODUCTION

Majority of the patients seeking orthodontic treatment present with a class 2 skeletal pattern. Treatment for these types of malocclusion depends on the growth potential of the patients. The different treatment of a Class 2 are growth modification, camouflage treatment, and surgical correction. Treatment of choice for patient undergoing orthodontic treatment are Fixed orthodontic appliance, Orthopedic/ Myofunctional appliance and Orthognathic surgery. The objectives in treating Class 2 malocclusion are reduction of overjet, overbite, correction of crowding, achieve class I canine and molar relationship, improvement of soft tissue profile.

TREATMENT OBJECTIVE

1. Align maxillary incisors and correct their inclination without increasing overjet
2. Correct anterior deep bite by controlling lower incisor eruption as vertical growth occurs.
3. Observe assymetry to be sure it is not getting worse.

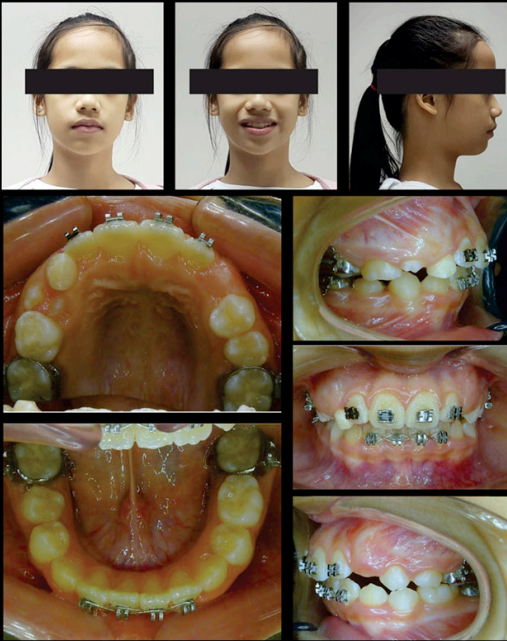


Figure 1. Soft Tissue Profile

CASE REPORT

A 10-year-old female patient came to the department of orthodontic infirmary with supervision from the parent wanting to continue orthodontic treatment. The cephalometric radiograph suggest a mild skeletal class 2 malocclusion, orthognathic maxilla and retrognathic mandible, with proportional facial height, with moderately convex profile excessive Overjet of 6 mm and overbite of 3 mm. The panoramic xray revealed erupting permanent teeth.

Treatment plan for this case which consists of 2x4 Appliance Therapy of the upper and lower arch and twin block appliance. The twin block appliance was used to position the mandible anteriorly by constructing an upper and lower bite blocks with an occlusal inclined planes.

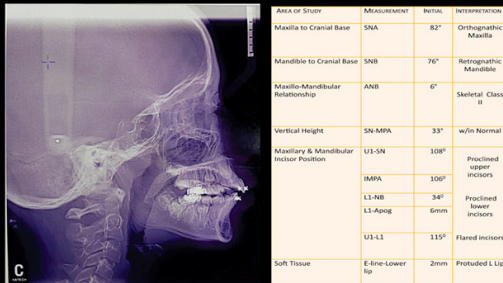
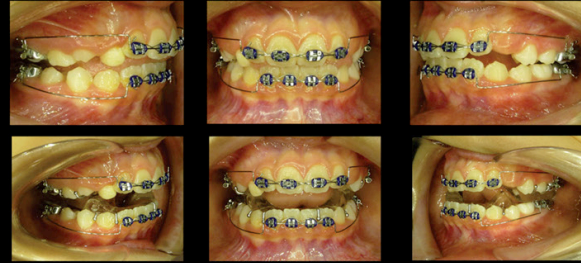
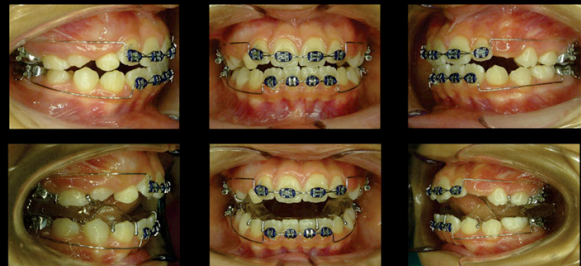


Figure 2. CEPHALOMETRIC ANALYSIS



January 2018. 016 ss u/l was instructed to put 016ss u/l wire Continue with twin block appliance



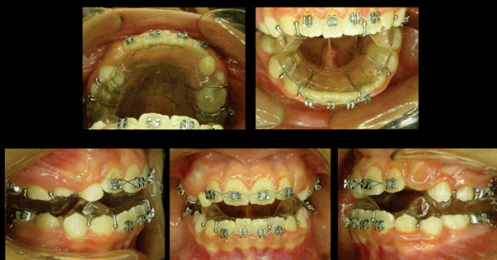
March 2018. Continue with twin block appliance Trimming of the accrylic block by 3mm



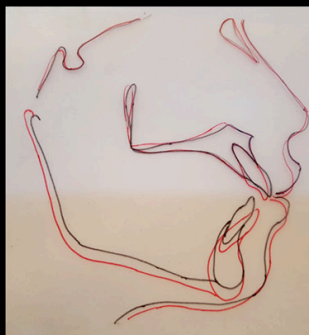
August 2018. Discontinue twin block appliance Lateral ceph and panoramic xray taken



February 2019. Follow up, 6 months Post Treatment Midline coincident, stable upper and lower incisor relation



December 2017. Installation upper and lower twin block To be worn every 24 hours



RESULT & CONCLUSION

Significant reduction of overjet from 6mm to 4mm, Overbite 3mm to 2mm. In the Maxilla SNA value from 82 to 80. In the Mandible SNB(NpogFH) value from 85 to 87, U1 SN from 108 to 103, IMPA from 106 to 110.

Favorable result of soft tissue profile is achieved but Canine classification is Class 2 with reduced overjet, we allow for settling of occlusion for further assessment and considering the age of the patient.