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Case Report
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Growing Child CL III Case with Lacking of the U6 to PTV Value

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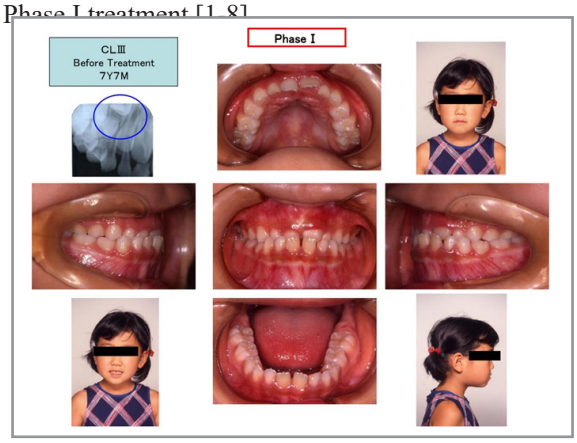
Abstract

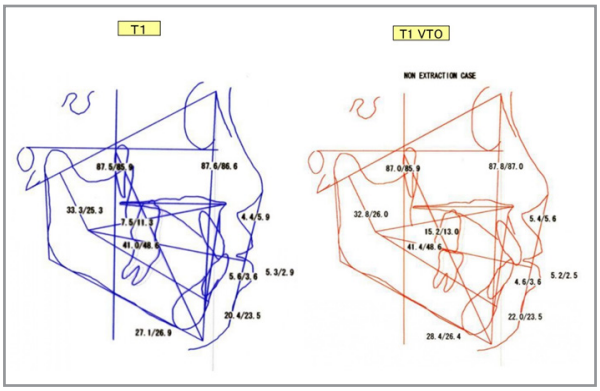
Applying Sagittal Appliance+ Facial Mask simultaneously to a growing child who shows lacking of Upper Molar to PTV and anterior cross bite on the front teeth to improve upper molar position and to correct a cross bite of the front teeth. After this Phase I treatment, we can easily continue this case as a normal treatment step. Then I wish to report this case here.

Keywords: Upper 6 to PTV, Sagittal Appliance, Face Mask

Introduction

When you treat growing child with anterior cross bite such a case like this, you should not to correct anterior cross bite firstly. You'd better to make sure where is the basic factor of this anterior cross bite. According to the diagnosis, this case has a small maxilla, from the result of Upper Molar to PTV. It shows 7.5mm/11.3mm. Then, we should move maxillae to anterior and downward direction and expansion to get enough space to erupt upper second molars. To accomplish these treatment goals, we started "upper Sagittal Appliance +Facial Mask" firstly. After using this appliance for 10-12months, we can check a result of this. If you could get close to the predicted result, you may treat the case with non-extraction, but if you could not get a good result, you may have to take an extraction planning. This case could get an adequate result after applying Sagittal Appliance + Facial Mask. So, I wish to show here following procedures after this Phase I treatment [1-8].





Initial Observation(T-1)

1. A brief document of the Patient
- Age and Sex ; Y.S., 7Y7M, F
- Chief Compliment; anterior crossbite

2. Facial and Intra oral observation
- Facial; slightly dished- in face to the middle face part.
- IOP; anterior cross bite, erupted U&L 1st molar, U &L DECB/BCDE Fig.(1)

3. IOX; impacted U right permanent canine,

4. Lateral Cephalometric X-ray and VTO (Visual Treatment Objectives) Fig. (2)
- Angle CL III (skeletal CL III), brachy facial type FA 87.1°/85.9°, FD 87.6°/81.6, MP 27.1°/26.9°, LFH 41.0 °/48.6° Conv. 4.4mm/5.8mm, U6 to PTV 7.5mm/11.5mm

L1 to Apo 5.6mm, 20.4

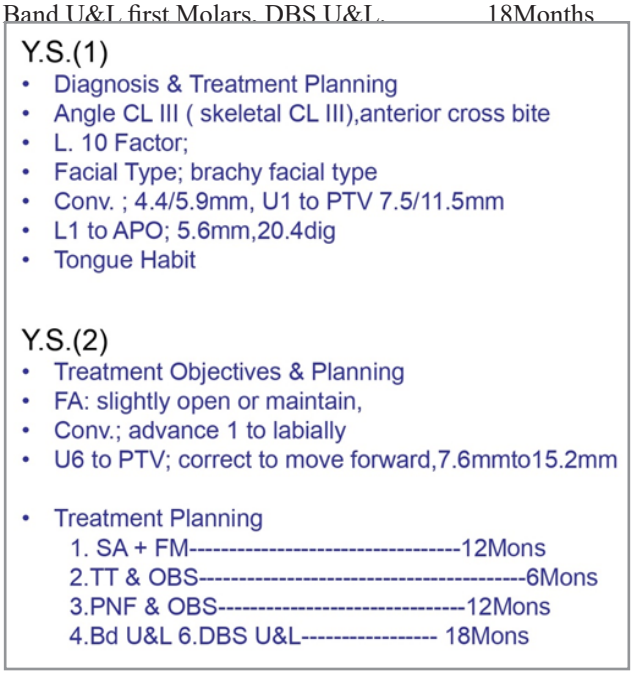
- VTO; FA 87°/85.9 Conv. 5.4mm/5.6mm U 6 to PTV 15.2mm/13.0mm, OJ/OB 3.0mm/2.1m Fig. (2)

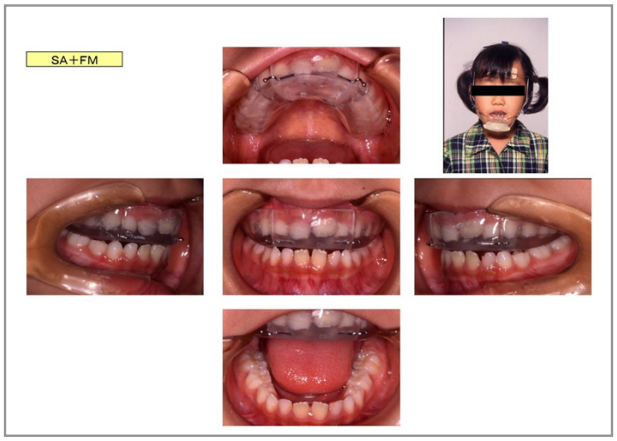
Diagnosis

- Facial Type—brachy facial type,
- Angle Class III + anterior cross bit

Treatment Planning

1. Sagittal Appliance + Facial mask 10Months
2. Tongue training & PNF, Observation. 6~8Months
3. Band U&L first Molars, DBS U&L. 18Months





Mechanics Step

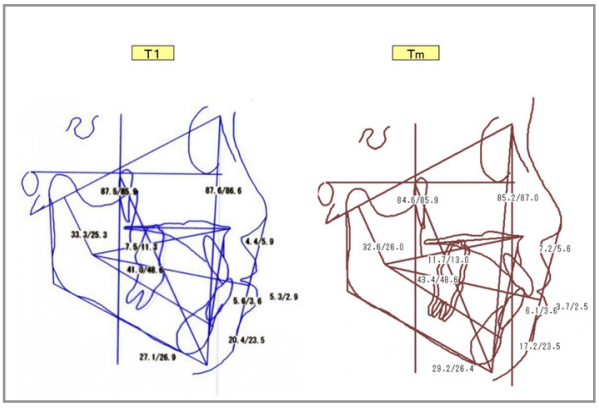
1st Phase Treatment

Step 1. Sagittal Appliance+ Facial Mask Fig (4)
patient have to ware SA + FM 14 to18 hors/ day/10Ms

Step 2. DBS Upper 21/12 for alignment. 5Ms

Finished 1st Phase (Fig 7). 15 Months

- IOP; corrected anterior cross bite and crowding
- F Photo; improved smile line and concave face

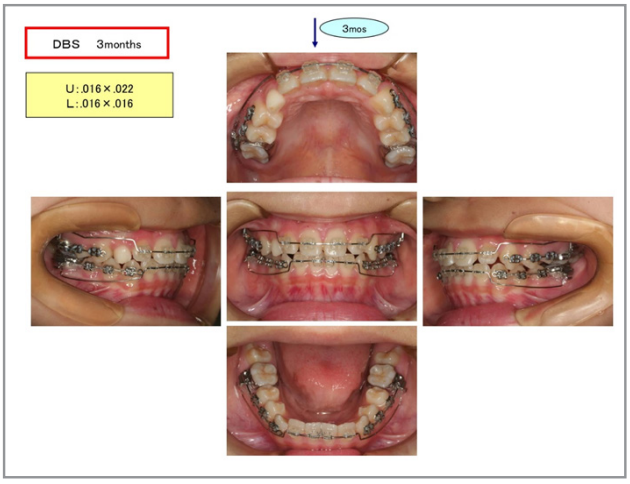


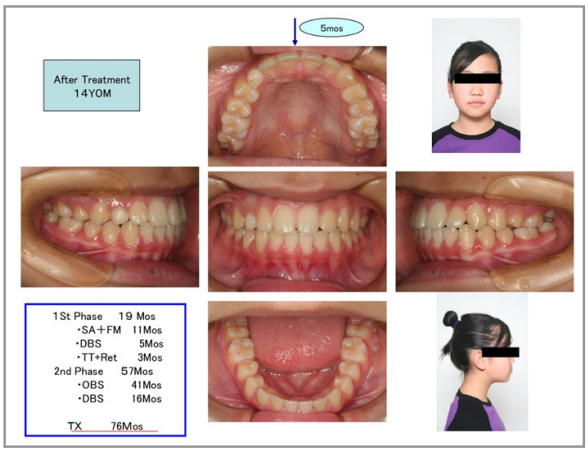
Comparison(L-tracing) (Fig.8) T1 Tm

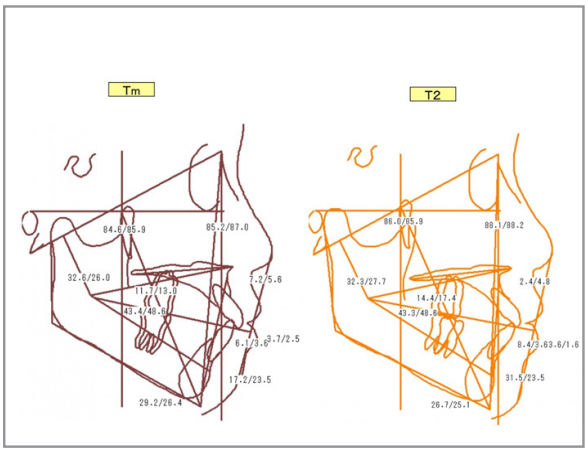
U6- P T V	7.5/11.3mm	11.7/13.0mm
FA-	87.5/85.9°	84.6/85.9°
OJ/OB	-3.0/4.0mm	3.0/4.0mm

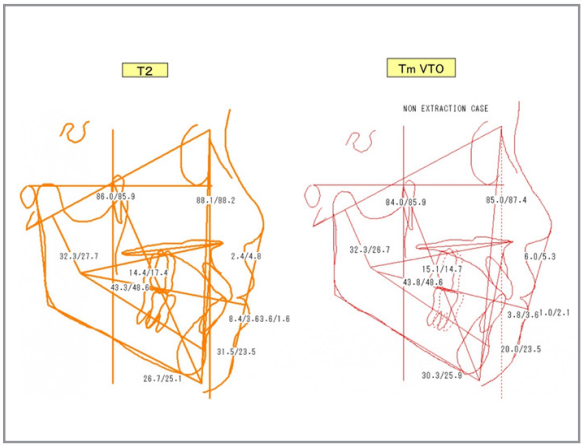
T1-Tm (IOP) Fig (9) anterior cross bite corrected T1-Tm (Facial Photo) Fig (10) T1. Tm

- Facial P.(frontal) short width of lips/ widened width of lips
- Facial P (lateral) dished-in of middle face/ corrected









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