

INTERDISCIPLINARY TREATMENT OF CLASS I MALOCCLUSION WITH LARGE CENTRAL DIASTEMA CAUSED BY LOW LABIAL FRENULUM WITH STANDARD EDGEWISE APPLIANCE

(Case Report)

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INTRODUCTION

A 14-year female patient came with Class I with a central diastema due to low labial frenulum on the upper jaw.

Frenectomies procedure done before the installation of the orthodontic appliance.

Standard edgewise fixed orthodontic appliance is used in these cases

DIAGNOSIS

Class I Type I with 6,5 mm multiple diastema, I-NA protrusion, 4 mm overbite, and 5 mm overjet

AIMS OF TREATMENT

Present the correction of large central diastema through periodontic and orthodontic approach

TREATMENT PROCEDURES

Treatment procedures

1. Leveling alignment
2. Diastema enclosure 11-21
3. Midline correction 11-21
4. Intrusion of anterior maxilla
5. Artistic positioning
6. Retention with fixed retainer

TREATMENT PROGRESS

Cephalometrics

	Norm	Before	After
SNA	82 ± 4	80	
SNB	80 ± 4	79	
ANB	2 ± 2	1	
UI-NA (mm)	4 ± 2	9	
< UI-NA	22 (15-32)	36	
LI-NB (mm)	4 ± 2	5	
< LI-NB	25 (15-32)	31	
< UI-LI	131 (120-150)	123	
Overbite	2 ± 1	4	1
Overjet	2 ± 1	5	2

Pre-treatment



Post-treatment



RESULTS

After 14 month of treatment, progress showed correction of the large central diastema, overbite, overjet, and I-NA

DISCUSSION

• Frenectomies procedure done before the installation of the orthodontic appliance to increase diastema enclosure

CONCLUSIONS

- Class I malocclusion caused by large central diastema caused by low labial frenulum on the upper jaw can be treated with interdisciplinary treatment between orthodontic and periodontics.
- The present case showed good achievement after multidisciplinary approach
- Patient satisfied with the result and have better functional and esthetical.