



**European
Society of Lingual
Orthodontics**

APPENDIX 1

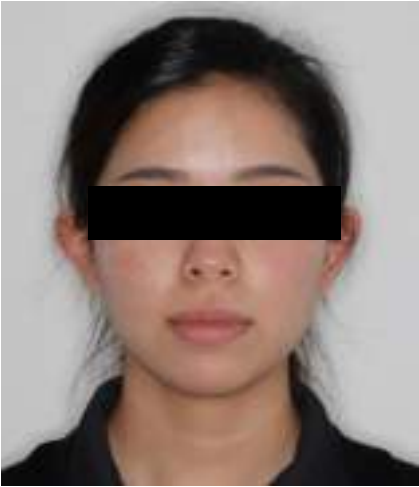
CASE PRESENTATION FORMS

CANDIDATE NUMBER: A11

CASE NUMBER: 1

Year: 2024









European
Society of Lingual
Orthodontics

RÉSUMÉ OF CASE

NAME: M.N.

BORN: 1999/1/20

SEX: Female

PRE-TREATMENT RECORDS: AGE: 22Y 4M DATE: 17. 6. 2021

CLASSIFICATION: Adult malocclusion- class III

TEETH MISSING BEFORE TREATMENT: 35

TREATMENT PLAN: Extraction of maxillary first premolars and mandibular first premolars and milk tooth

APPLIANCE: FLB(AMERICAN ORTHODONTICS)

TREATMENT STARTED: AGE: 22Y 4M DATE: 17. 6. 2021

TREATMENT FINISHED: AGE: 23Y 8M DATE: 20. 9. 2022

ACTIVE TREATMENT TIME: 1Y 4M

POST-TREATMENT RECORDS: AGE: 23Y 8M DATE: 20. 9. 2022

RETAINERS: a)upper: Clear Retainer DATE: 20. 9. 2022
a)lower: Clear Retainer and Fixed Retainer

RETENTION ENDED: a)upper: Clear Retainer DATE: 19. 3. 2024
a)lower: Clear Retainer and Fixed Retainer





DIAGNOSTIC DESCRIPTION OF THE MALOCCLUSION

A. SUMMARY

Patient's chief complaints were lip protrusion and missing permanent teeth.

Class III with bimaxillary protrusion.

For improvement patient's profile and protrusion, extraction of upper and lower premolar were needed.

B. EXAMINATION OF HEAD AND FACE

From lateral view, convex profile.

From frontal view, Noting particular.

Muscle strain of mentalis was shown, when patient lip close.

C. FUNCTIONAL EXAMINATION

Noting particular

D. INTRAORAL EXAMINATION

Class III molar and canine relationship.

Overjet +2.0 mm, Overbite +1 5mm

Late retention of mandibular left second deciduous molar.

E. DENTAL CASTS

Mandibular arch: Arch length discrepancy : +10.0mm

Maxillary arch: Arch length discrepancy : -1.0mm

Occlusion Sagittal: Angle class III, overjet +2.0mm

Occlusion Vertical: Overbite: +2.0mm

Occlusion Transversal: Noting particular



TRACING OF LATERAL SKULL RADIOGRAPH BEFORE TREATMENT

CANDIDATE NUMBER: A11

CASE NUMBER: 1

DATE: 17. 6. 2021

AGE: 22Y 4M



TRACING OF LATERAL SKULL RADIOGRAPH AT COMPLETION OF TREATMENT

CANDIDATE NUMBER: A11

CASE NUMBER: 1

DATE: 20. 9. 2022

AGE: 23Y 8M



LATERAL SKULL RADIOGRAPH BEFORE TREATMENT

CANDIDATE NUMBER: A11

CASE NUMBER: 1

DATE: 17. 6. 2021

AGE: 22Y 4M



LATERAL SKULL RADIOGRAPH AT COMPLETION OF TREATMENT

CANDIDATE NUMBER: A11

CASE NUMBER: 1

DATE: 20. 9. 2022

AGE: 23Y 8M

**PERIAPICAL OR PANORAMIC RADIOGRAPHS
BEFORE TREATMENT**



CANDIDATE NUMBER: A11

CASE NUMBER: 1

DATE: 17. 6. 2021

AGE: 22Y 4M



**PERIAPICAL OR PANORAMIC RADIOGRAPHS
AT COMPLETION OF TREATMENT**

CANDIDATE NUMBER: A11

CASE NUMBER: 1

DATE: 20. 9. 2022

AGE: 23Y 8M



CEPHALOMETRIC MORPHOLOGICAL ASSESSMENT 1

Sagittal Skeletal Relations

Maxillary Position
S-N-A

Mandibular Position
S-N-Pg

Sagittal Jaw Relation
A-N-Pg

Vertical Skeletal Relations

Maxillary Inclination
S-N / ANS-PNS

Mandibular Inclination
S-N / Go-Gn

Vertical Jaw Relation
ANS-PNS / Go-Gn

Dento-Basal Relations

Maxillary Incisor Inclination
 $\underline{1}$ - ANS-PNS

Mandibular Incisor Inclination
 $\bar{1}$ - Go-Gn

Mandibular Incisor Compensation
1 - A-Pg (mm)

Dental Relations

Overjet (mm)

Overbite (mm)

Interincisal Angle
 $\underline{1} / \bar{1}$

Pretreatment	Mean	SD
85.0°	82°	± 3.5°
77.5°	80°	± 3.5°
7.5°	2°	± 2.5°
8.5°	8°	± 3.0°
29.5°	33°	± 2.5°
21.0°	25°	± 6.0°
120.0°	110°	± 6.0°
109.5°	94°	± 7.0°
4.5mm	2	± 2.0
2.0mm	3.5	± 2.5
1.5mm	2	± 2.5
128.0°	132°	± 6.0°



**TREATMENT STEPS INTRA-ORAL OCCLUSAL VIEW COLOUR PHOTOGRAPHS
UPPER ARCH**

CANDIDATE NUMBER: A11

CASE NUMBER: 1

DATE: 17. 6. 2021

AGE: 22Y 4M



**TREATMENT STEPS INTRA-ORAL OCCLUSAL VIEW COLOUR PHOTOGRAPHS
LOWER ARCH**

CANDIDATE NUMBER: A11

CASE NUMBER: 1

DATE: 17. 6. 2021

AGE: 22Y 4M



RÉSUMÉ OF THE TREATMENT CARRIED OUT INCLUDING ANY DIFFICULTIES ENCOUNTERED

TREATMENT GOUVERNANCE

1. Diagnosis

2. Indirect bonding with lingual appliances (FLB).

33 had to be remade because the device did not fit well .

3. Leveling & Aligning upper arch.

(Copper- NiTi: .013, .016 × .016)

The upper arch was leveled to prevent the bowing effect, and then extracted.

4. Extraction of 14, 24, 75, 45 and Leveling & Aligning lower arch.

(Copper- NiTi: .013, .016 × .016)

The molar relationship was class 3, but since the patient's main complaint was lip protrusion, I chose to extract 14 and 24.

5. En mass retraction of anterior teeth using sliding mechanics with class II elastics.

(TMA: .0175 × .0175, .017 × .025 SS: .016 × .022)

To prevent bowing effect, anti bowing curve added closing wire.

Class II elastics were placed on the hooks of the wires in maxilla and on the hooks of brackets 36 and 46.

6. Detailing

(TMA: .0175 × .0175, .017 × .025)

7. Retaining.



CEPHALOMETRIC MORPHOLOGICAL ASSESSMENT 2

Sagittal Skeletal Relations

Maxillary Position
S-N-A

Mandibular Position
S-N-Pg

Sagittal Jaw Relation
A-N-Pg

Vertical Skeletal Relations

Maxillary Inclination
S-N / ANS-PNS

Mandibular Inclination
S-N / Go-Gn

Vertical Jaw Relation
ANS-PNS / Go-Gn

Dento-Basal Relations

Maxillary Incisor Inclination
 $\underline{1}$ - ANS-PNS

Mandibular Incisor Inclination
 $\bar{1}$ - Go-Gn

Mandibular Incisor Compensation
1 - A-Pg (mm)

Dental Relations

Overjet (mm)

Overbite (mm)

Interincisal Angle
 $\underline{1} / \bar{1}$

Pretreatment	Posttreatment	Mean SD
85.0°	84.5°	82°± 3.5°
77.5°	78.0°	80°± 3.5°
7.5°	6.5°	2°± 2.5°
8.5°	8.5°	8°± 3.0°
29.5°	29.5°	33°± 2.5°
21.0°	21.0°	25°± 6.0°
120.0°	103.5°	110°± 6.0°
109.5°	87.5°	94°± 7.0°
4.5mm	0.0mm	2± 2.0
2.0mm	3.5mm	3.5± 2.5
1.5mm	2.0mm	2± 2.5
128.0°	148.0°	132°± 6.0°





RADIOGRAPHIC ANALYSIS AT COMPLETION OF TREATMENT

A. INTRAORAL / PANORAMIC RADIOGRAPH

Root were almost parallel.

Minor distal tipping of 12. But there is no problem with the occlusion.

Alveolar bone level was no change.

No root resorption.

No resorption of the temporomandibular joint.

B. INTERPRETATION OF CEPHALOMETRIC ASSESSMENT

1. Sagittal Skeletal Relations:

Mandibular Position (S-N-Pg) was slightly increased. Therefore, Sagittal Jaw Relation was slightly decreased.

2. Vertical Skeletal Relations:

Mandibular Inclination (S-N / Go-Gn) and Vertical Jaw Relation (ANS-PNS/Go-Gn) were unchanged from before treatment.

3. Dento-Basal Relations:

Maxillary incisors were well positioned relative to line ANS-PNS. Mandibular incisor well positioned relative to line Go-Gn.

4. Dental relations:

Normal overjet and overbite

Interincisal Angle was large, which was thought to be due to the large Sagittal jaw relation.

5. Esthetic Profile:

Nasolabial angle was increased. Profile was good.



DESCRIPTION OF THE TREATMENT RESULT

TREATMENT RESULT ORIENTATION

- 1.The lip protrusion and bimaxillary protrusion were improved.
- 2.Class I canine and Class I molar relationships were obtained.
- 3.Normal overjet & overbite were obtained.

Extraction of 14,24,75, and 44 was selected to improve the patient's chief complaint of lip protrusion and missing teeth.

Appropriate treatment results were obtained by closing the extraction spaces while using class II elastics.

No clockwise rotation of the mandible occurred.

