



**European  
Society of Lingual  
Orthodontics**

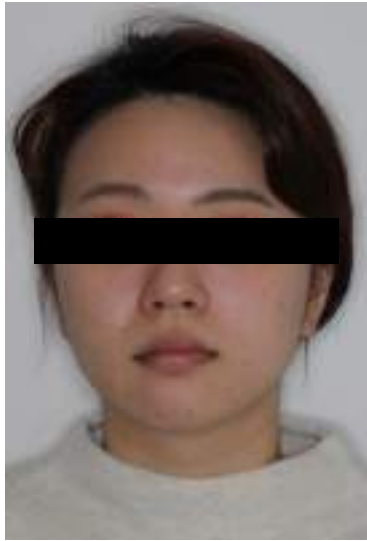
# **APPENDIX 1**

## **CASE PRESENTATION FORMS**

**CANDIDATE NUMBER: A11**

**CASE NUMBER: CASE 2**

**Year: 2024**







European  
Society of Lingual  
Orthodontics

# RÉSUMÉ OF CASE

NAME: Nana. T

BORN: 7. 8.1999

SEX: Female

PRE-TREATMENT RECORDS:

AGE: 21 Y 3M

DATE: 13.11.2020

CLASSIFICATION: Adult malocclusion- Class III

TEETH MISSING BEFORE TREATMENT: 27

TREATMENT PLAN: Non ext distalization and IPR

APPLIANCE: FLB(AMERICAN ORTHODONTICS)

TREATMENT STARTED:

AGE: 21 Y 4M

DATE: 11.12.2020

TREATMENT FINISHED:

AGE: 22Y 9M

DATE: 9.5.2022

ACTIVE TREATMENT TIME:

1Y 10M

POST-TREATMENT RECORDS:

AGE: 22Y 9M

DATE: 6.6.2022

RETAINERS:

a)upper: Clear Retainer

DATE: 6.6.2022

a)lower: Clear Retainer

RETENTION ENDED:

a)upper: Clear Retainer

DATE: 8.3.2024

a)lower: Clear Retainer





# DIAGNOSTIC DESCRIPTION OF THE MALOCCLUSION

## A. SUMMARY

The patient's chief complaint was an overjet and spaced arch.  
Class III with spaced arch.  
Distalization of the maxillary arch was required to correct the excessive overjet.

## 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 + 6.5 mm, Overbite + 3.0 mm  
There is a space in the upper left premolar area.  
The upper left second molar is missing.

## E. DENTAL CASTS

Mandibular arch: Arch length discrepancy : 0.0mm  
Maxillary arch: Arch length discrepancy : +1.5mm  
Occlusion Sagittal: Angle class III, overjet +5.5mm  
Occlusion Vertical: Overbite: +4.0mm  
Occlusion Transversal: Noting particular



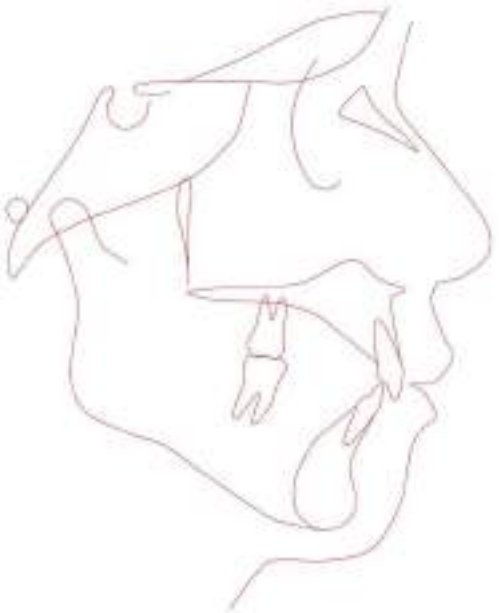
## **TRACING OF LATERAL SKULL RADIOGRAPH BEFORE TREATMENT**

CANDIDATE NUMBER: A11

CASE NUMBER: 2

DATE: 11. 12. 2020

AGE: 21Y 4M



## **TRACING OF LATERAL SKULL RADIOGRAPH AT COMPLETION OF TREATMENT**

CANDIDATE NUMBER: A11

CASE NUMBER: 2

DATE: 9. 5. 2022

AGE: 22Y 9M



**LATERAL SKULL RADIOGRAPH  
BEFORE TREATMENT**

CANDIDATE NUMBER: A11

CASE NUMBER: 2

DATE: 11. 12. 2020

AGE: 21Y 4M



**LATERAL SKULL RADIOGRAPH  
AT COMPLETION OF TREATMENT**

CANDIDATE NUMBER: A11

CASE NUMBER: 2

DATE: 9. 5. 2022

AGE: 22Y 9M



**PERIAPICAL OR PANORAMIC RADIOGRAPHS  
BEFORE TREATMENT**

CANDIDATE NUMBER: A11

CASE NUMBER: 2

DATE: 11. 12. 2020

AGE: 21Y 4M



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

CANDIDATE NUMBER: A11

CASE NUMBER: 2

DATE: 9. 5. 2022

AGE: 22Y 9M





# 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  
 $\overline{1}$  - Go-Gn

Mandibular Incisor Compensation  
1 - A-Pg (mm)

## Dental Relations

Overjet (mm)

Overbite (mm)

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

Pretreatment	Mean	SD
91.0°	82°± 3.5°	
83.5°	80°± 3.5°	
7.5°	2°± 2.5°	
4.5°	8°± 3.0°	
27.5°	33°± 2.5°	
23.0°	25°± 6.0°	
102.0°	110°± 6.0°	
101.5°	94°± 7.0°	
3.0mm	2± 2.0	
6.5mm	3.5± 2.5	
3.0mm	2± 2.5	
133.0°	132°± 6.0°	





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

CANDIDATE NUMBER: A11

CASE NUMBER: 2

DATE: 11. 12. 2020

AGE: 21Y 4M



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

CANDIDATE NUMBER: A11

CASE NUMBER: 2

DATE: 11. 12. 2020

AGE: 21Y 4M





# RÉSUMÉ OF THE TREATMENT CARRIED OUT INCLUDING ANY DIFFICULTIES ENCOUNTERED

## TREATMENT GOUVERNANCE

1. Diagnosis

2. Holding arch was attached to the maxilla and anchor screws were inserted.  
Distalization of the maxillary molars was initiated.

To prevent the molars from tilting distally, hooks were attached to the incisal and cervical sides of the holding arch to control the direction of traction.

3. Indirect bonding with lingual appliances (FLB).

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

4. Leveling & Aligning both arches.

(Copper- NiTi: .013, .016 × .016)

5. En mass retraction of upper anterior teeth using sliding mechanics.

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

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

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  
 $\overline{1}$  - Go-Gn

Mandibular Incisor Compensation  
1 - A-Pg (mm)

## Dental Relations

Overjet (mm)

Overbite (mm)

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

Pretreatment	Posttreatment	Mean SD
91.0°	91.0°	82°± 3.5°
83.5°	83.0°	80°± 3.5°
7.5°	8.0°	2°± 2.5°
4.5°	4.5°	8°± 3.0°
27.5°	28.5°	33°± 2.5°
23.0°	24.0°	25°± 6.0°
102.0°	101.0°	110°± 6.0°
101.5°	98.5°	94°± 7.0°
3.0mm	1.0mm	2± 2.0
6.5mm	4.0mm	3.5± 2.5
3.0mm	3.0mm	2± 2.5
133.0°	136.5°	132°± 6.0°





# RADIOGRAPHIC ANALYSIS AT COMPLETION OF TREATMENT

## A. INTRAORAL / PANORAMIC RADIOGRAPH

Root were almost parallel.  
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 decreased. Therefore, Sagittal Jaw Relation was slightly increased.

### **2.Vertical Skeletal Relations:**

Mandibular Inclination (S-N / Go-Gn) and Vertical Jaw Relation (ANS-PNS/Go-Gn) were slightly increased.

### **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 increased but was within the normal range.

### **5.Esthetic Profile:**

Nasolabial angle was slightly increased. Profile was good.





# DESCRIPTION OF THE TREATMENT RESULT

## TREATMENT RESULT ORIENTATION

1. Overjet and spaced arch were improved.
2. Class I canine and Class I molar relationships were obtained.
3. Normal overjet & overbite were obtained.

The maxillary dentition was distalized to improve the overjet, which was the patient's chief complaint.

The overjet improved, but a slight clockwise rotation of the mandible occurred.

