



### Treatment of Crossbite in Adult Patients

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**Received Date: August 23, 2022**

**Published Date: September 01, 2022**

#### Case Report

A 19 years and 7 months female patient presented to the clinic fit and well both medically and dentally. She was class 3 incisors based on skeletal class 1 with increased vertical proportional and unilateral cross bite on the left side with average incisal show during smile and overjet 1mm and overbite 10% Buccal segment on left side was half two molar and canine and right-side class 1 molar and canine and lower midline shift to left hand side 3mm Upper spacing 11 mm due to unerupted upper left canine and peg shape lateral and lower 3 mm spacing.



**SECTION 1. PRE-TREATMENT ASSESSMENT**

**PATIENT DETAILS**

**EXTRA-ORAL ASSESSMENT**

<b>Initials</b>	B.E
<b>Sex</b>	Female
<b>Age at start of treatment</b>	19.7
<b>Date of start of treatment</b>	21
<b>Duration of treatment.</b>	Year and 5 months
<b>Patient Complaint</b>	I don't like my hidden teeth
<b>Medical History</b>	Free
<b>Other relevant information</b>	

<b>Skeletal Antero-Posterior</b>	Class two subdivision
<b>Skeletal Vertical</b>	Increased LAFH
<b>Skeletal Transverse</b>	Unilateral posterior cross bite
<b>Soft Tissue Assessment</b>	Convex profile

**INTRA-ORALASSESSMENT**

<b>Mandibular Arch crowding/spacing</b>	3mm spacing
<b>Maxillary Arch crowding/spacing</b>	11 mm spacing including canine space and peg shape lateral
<b>Incisor relationship</b>	Class 3 incisors
<b>Overjet (mm)</b>	1mm
<b>Overbite</b>	10%
<b>Centrelines</b>	Upper midline on and lower midline shifted
<b>Left Buccal Segment relationship (molars)</b>	1/2 Class II
<b>Left Buccal Segment relationship (canines)</b>	Unidentified
<b>Right Buccal Segment relationship (molars)</b>	Class I
<b>Right Buccal Segment relationship (canines)</b>	Class I
<b>Crossbite (Displacement)</b>	Unilateral buccal Crossbite at left side
<b>Other occlusal features</b>	Peg shape lateral and small sized One
<b>Bolton Analysis (3-3)</b>	
<b>Bolton Analysis (6-6)</b>	
<b>General Dental Condition</b>	Fair oral hygiene

**GENERAL RADIOGRAPHIC EXAMINATION**

<b>Absent teeth</b>	None
<b>Teeth of poor prognosis</b>	None
<b>Other relevant radiographic findings</b>	None

**PRE-TREATMENT PHOTOGRAPHS: EXTRA-ORAL**

[Insert frontal and profile photographs here]



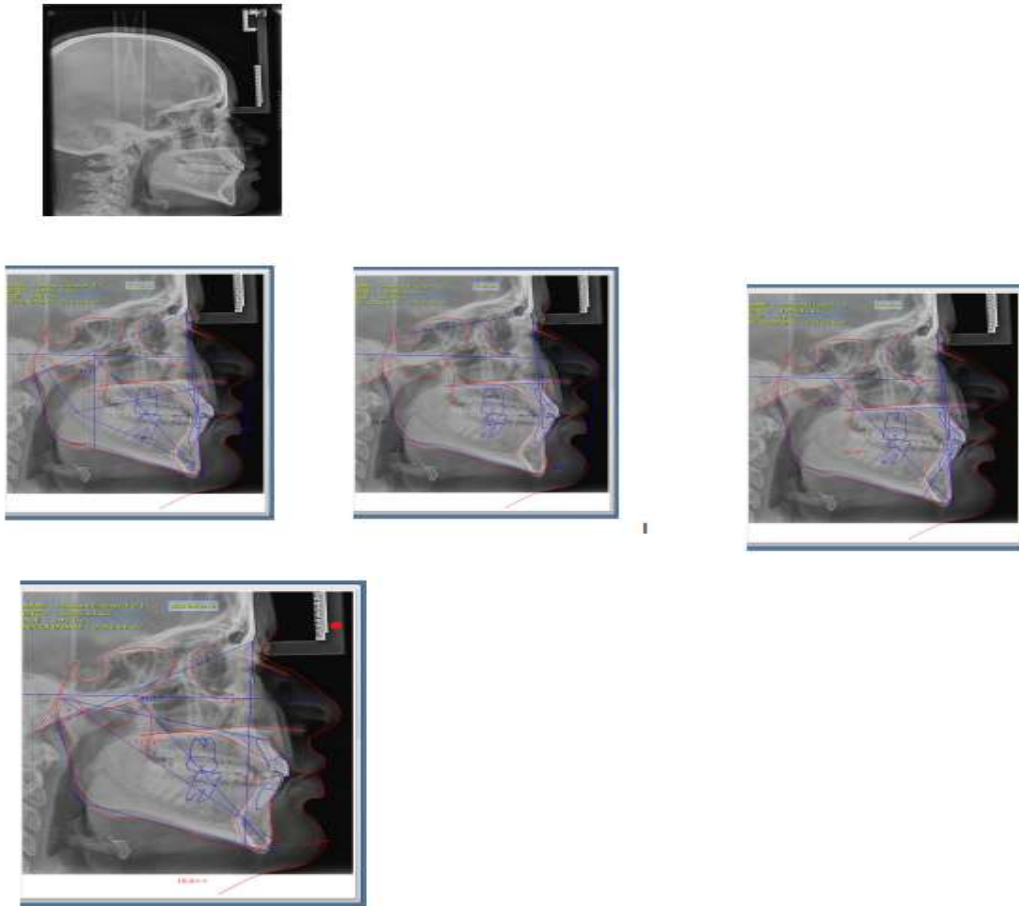
**PRE-TREATMENT PHOTOGRAPHS: INTRA-ORAL**

[Insert anterior, lateral and occlusal photographs here]



**PRE-TREATMENT RADIOGRAPHS**

[Insert radiographs here]



**PRE-TREATMENT CEPHALOMETRIC ANALYSIS:**

Variable	Norms	T0
SNA	86	
SNB	83	
ANB	3	
MMPA	30	
Face height ratio	69%	
SN to maxillary plane	17	
Upper incisor to maxillary plane	116	
Lower incisor to mandibular plane	93	
Interincisal angle	134	
Wits appraisal	-4mm	
Lower incisor to APO line	-1	

**TREATMENT PLAN**

<b>Appliances</b>	Using preadjusted edgewise fixed appliance Roth prescription with 0.022*0.028 slot
<b>Extractions</b>	Non extraction
<b>Special Anchorage</b>	None
<b>Additional dental treatment</b>	Composite build up to both upper lateral
<b>Retention</b>	upper and lower fixed retainer placed on lingual surface of upper and lower teeth extending from UL3 to UR3 and LL3 and LR3 with vacuum formed retainer

**TREATMENT PROGRESS**

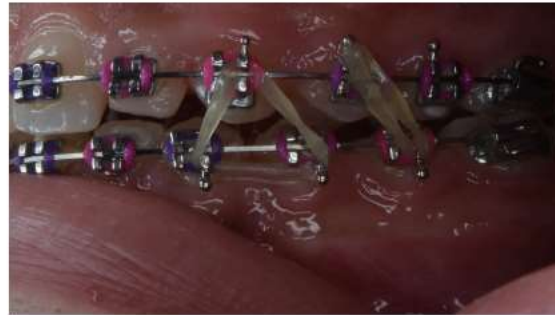
<b>Age at start of active treatment</b>	19 years and 7 months
<b>Total active treatment</b>	1 year and 5 months
<b>End of retention</b>	Fixed retainer will be placed for the lifetime

**SECTION2. TREATMENT**

**IMAGESOFKEYSTAGES/ MECHANICSINTREATMENT**

[Insert images here – 20 Images Max]





Month RCSEd 2019

### **Treatment Planning :**

- 1- Bonding upper and lower arch with fixed ore adjusted edgewise appliance slot 0.022\*0.028 slot Roth prescription.
- 2 - Placing wire 16 Niti upper and lower.
- 3- Expose UL3 by laser to place the bracket on it.

### **After 3 months :**

- 1- Reaching to the Main working arch wire 19\*25 Ss and place buttons on the palatal side of the teeth UL4 and UL5 to allow place cross elastics to correct unilateral cross bite.
- 2- Locating lower arch and placing crimpable hooks distal to lateral both side and closing the space and adjust midline shoft during closing the spacing.

### **After 6 months :**

Patient came with over correction of unilateral cross bite.

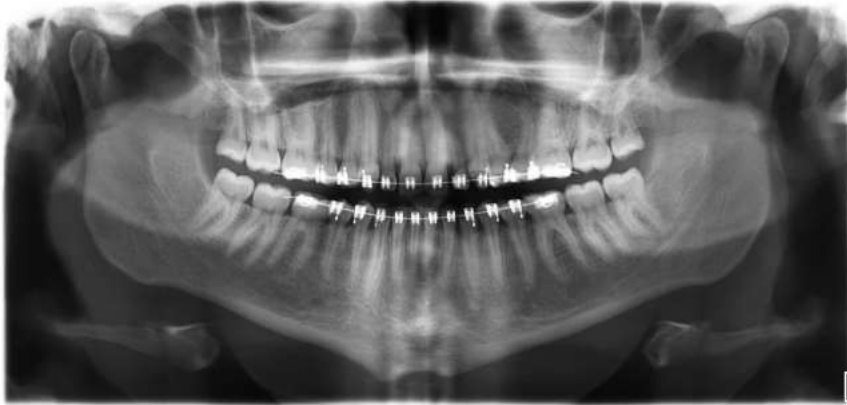
Class 1 molar and canine bilaterally.

No spaces lower and no midline shift.

Now : it's time to refer to the esthetic dentist to build the peg shape lateral and micro Donita one with composite

**After 3 months**

Debonding of upper and lower arch after placing the fixed lingual retainer upper from Canine to canine and lower from lateral to lateral and impression from vaccum formed retainer.





**POST-TREATMENT PHOTOGRAPHS:**

(Extra-Oral and Intra-Oral- Max 8 images)



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**POST-TREATMENTPHOTOGRAPHS:**

(Retainers)(Max 3 images)

