# Extraction Treatment for an Asymmetric Class III/I Malocclusion with Blocked-Out Canine, Bimaxillary Crowding, Midline Deviation


## Abstract

*A 20y2m female presented for orthodontic consultation to evaluate severe crowding, ectopic eruption of the upper right canine, a canted occlusal plane, and protrusive lips. Clinical examination revealed a Class III/I asymmetric malocclusion with severe crowding, narrow arches, a steep mandibular plane (SN-MP 41˚), and flared lower incisors (L1 to MP 108˚). The Discrepancy Index (DI) for this challenging malocclusion was 32. All four first premolars were extracted and the malocclusion was treated with passive self-ligating brackets. The pleasing result is documented by a Cast Radiograph Evaluation (CRE) of 24 and a Pink & White (P&W) dental esthetic score of 4. Follow-up records two years later revealed a stable result. (Int J Orthod Implantol 2016;42:64-80)*



***Key words:***

*Blocked out canine, severe crowding, midline deviation, asymmetric Class III malocclusion, passive self-ligating appliance, posterior crossbite*


## Introduction

Blocked-out maxillary canines are one of the most frequently encountered problems in orthodontic practice because they are usually the last teeth to erupt during the late transitional phase of dental development. If the maxillary dentition is severely crowded, one or both canines may erupt high in the labial fold. This is a common problem in developed countries because children tend to consume a refined diet, which does not require sufficient biting strength to fully develop the jaws in width.[1]

Consistent with this dental history, a 20y2m female presented for orthodontic consultation with severe crowding, relatively narrow arches, a unilateral posterior lingual crossbite, a unilateral Class III molar relation, and a unilateral blocked out maxillary canine. This case report demonstrates the treatment using passive self ligating brackets, open coil springs, bilateral Class III and crossbite elastics, which eventually led to elimination of orthognathic surgical approaches.

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## Diagnosis

Pre-treatment facial photographs (*Fig. 1*) revealed a protrusive facial profile, primarily due to the prominent position of the lower lip. Intraoral views (*Fig. 2*) and study casts (*Fig. 3*) showed a Class III molar relationship on the right side and Class I molar relationship on the left side. Tooth Size Arch Length Discrepancy was 13mm of crowding in the maxillary arch, with 9mm of crowding in the mandibular arch. The right permanent maxillary canine (*Tooth #6*) was blocked out of the arch in the labial direction. In centric occlusion (*Co*), the upper midline was shifted to the right ~5mm. Crossbites were noted on the right posterior (*Teeth #31*) and anterior (*Teeth #22, 23, 26-28*) regions. Detailed photograph of the maxillary anterior regions (*Fig. 4*) documented the complexity of the malocclusion. In addition, generalized crowding was noted in both arches (*Figs. 2-3*). There was no further contributory medical or dental history.

Cephalometric radiograph (*Fig. 5*) revealed skeletal Class I relationship (*SNA 81°, SNB 77°, ANB 4°*), increased mandibular plane angle (*SN-MP 41°*), as well as 2mm negative overjet and proclination of both upper and lower incisors (*L1 to MP 108°*). Panoramic radiographs (*Fig. 5*) showed that the

*Fig. 1: Pretreatment facial photographs show a relatively protrusive profile with a prominent lower lip.*

*Fig. 2: Pre-treatment intraoral photographs*

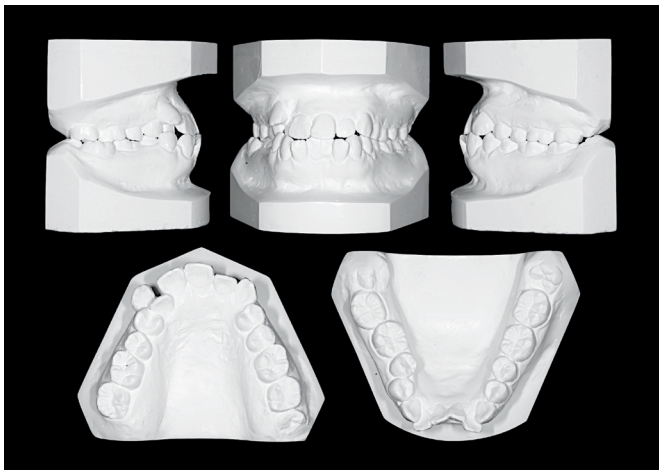
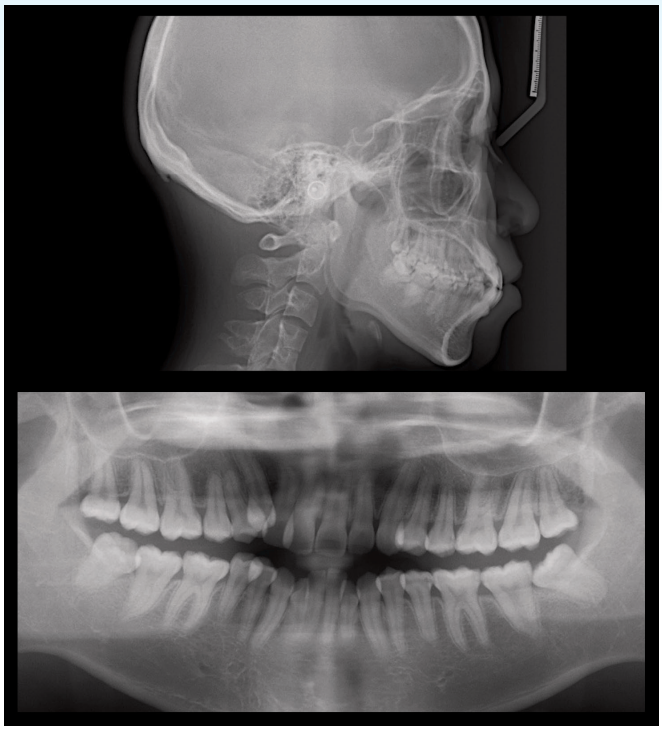


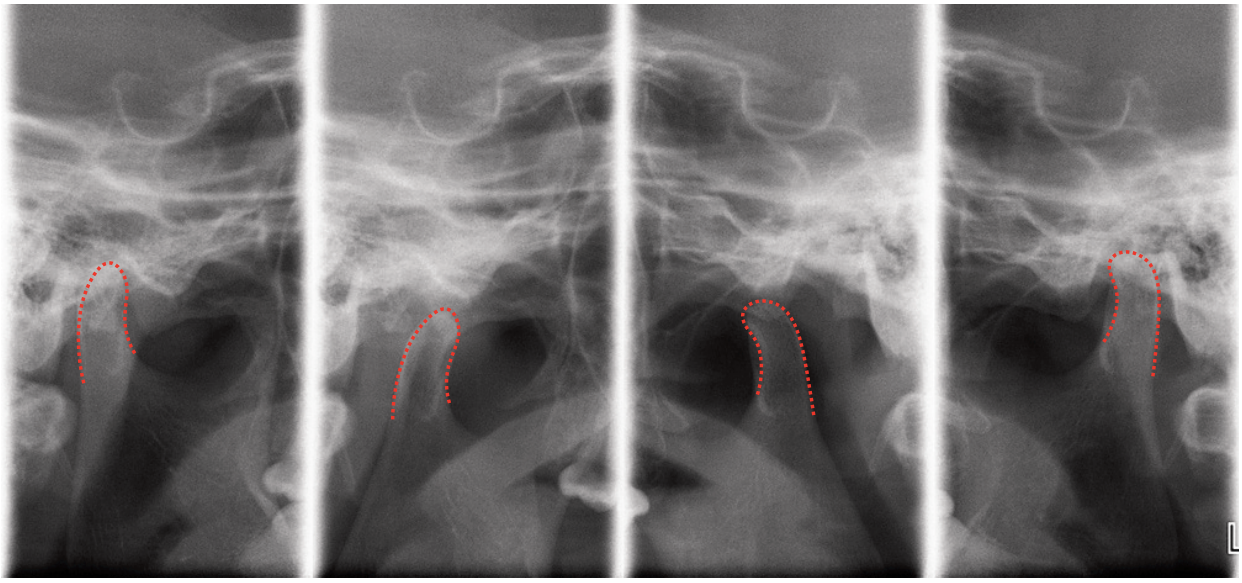
*Fig. 3: Pre-treatment study models (casts)*

upper incisors (*Teeth #7-10*) were tilted in a clockwise direction producing a canted occlusal plane (*Fig. 1*). Asymmetric movement of condylar head was documented during mouth opening (*Fig. 6*). There were no other signs or symptoms of temporo-mandibular disorder.

■ *Fig. 4:*
*The right maxillary canine is blocked out facially.*



■ *Fig. 5:*
*Pre-treatment cephalometric and panoramic radiographs*



■ *Fig. 6:*
*The temporo-mandibular joint imaging shows asymmetric movement of the condylar head during mouth opening. The two images on the left show the right condyle in the closed and open mouth positions, respectively. The two images on the right show the left condyle in the open and closed mouth positions, respectively.*

The American Board of Orthodontics (*ABO*) Discrepancy Index (*DI*) was 32 points as shown in the subsequent worksheet 1.

## Treatment Objectives

The principal objectives of the treatment were to correct (*1*) the blocked-out canine; (*2*) severe crowding in both arches; and (*3*) lingual crossbite on the right side.

## Treatment Alternatives

Surgically assisted rapid palatal expansion and distraction of the labially placed maxillary right canine into the extraction space of the right first premolar by taking anchorage from a skeletal anchorage device, it was once used as a means to correct a case with a unilateral posterior lingual crossbite, an asymmetric molar relationship, and a maxillary right canine high in the labial sulcus.[2] As the patient refused to undergo surgery, we decided to plan a non-surgical approach.

The first premolars in all four quadrants were extracted to create space for correction of severe crowding in both arches. An open coil spring is indicated in the upper arch between the right central incisor and canine to create space for alignment of the palatally displaced lateral incisor, as well as to help correct the dental midline. Bilateral Class III and crossbite elastics[3] in addition to detailing bends will be used to refine the intermaxillary alignment. Following the removal of fixed appliances, the corrected dentition will be retained in both arches with clear overlay and fixed anterior retainers (*upper 2-2, lower 3-3*).

## Treatment Progress

The fixed appliance selected was the .022" slot Damon Q bracket system (*Ormco, Glendora, CA*) with standard torque brackets in the anterior segments. The programmed archwire sequence for the upper arch was .014" CuNiTi, .014x.025" CuNiTi, .017x.025" TMA, and .019x.025" SS, and the lower archwire sequence was .014" CuNiTi, .014x.025" CuNiTi, .017x.025" TMA, and .016x.025" SS.

After extracting the four first premolars, brackets were bonded on all maxillary teeth. When the initial maxillary archwire (*.014" CuNiTi*) was inserted, an open coil spring was placed between the right central incisor and canine. A plastic thread was tied from right lateral incisor to the archwire (*Figs. 7-8*) to help control flaring of the central incisor and initiate


*Fig. 7:*
*A compressed open coil spring was placed between right central incisor and canine, and then a plastic thread tied from right lateral incisor bracket to the main archwire. This mechanism is designed to reduce incisal flaring during the space opening process.*

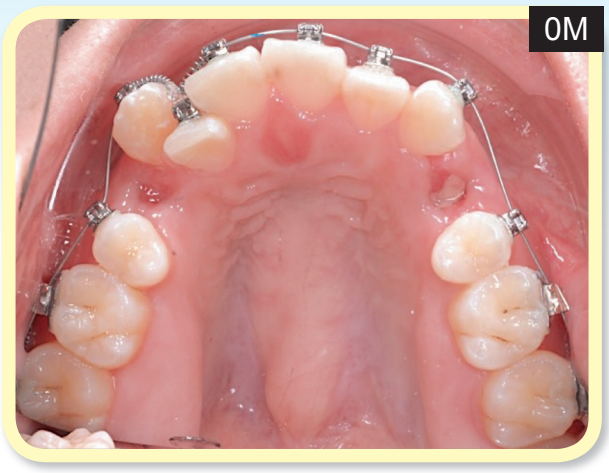



*Fig. 8:*
*First premolars were extracted and the upper arch was bonded.*

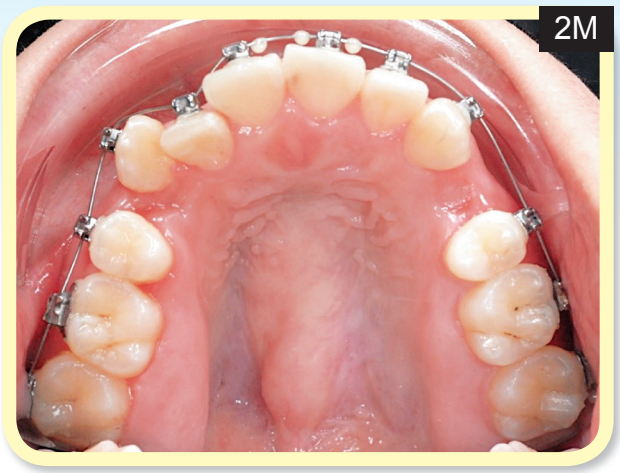



*Fig. 9:*
*After 2 months of treatment, the right maxillary canine and adjacent lateral incisor were sufficiently aligned to be engaged with the continuous archwire.*

correction of the maxillary midline. The patient was instructed to practice "*lip seal exercise*" to help prevent flaring of the anterior teeth.

» In the 2nd month of treatment, all teeth in the maxillary arch were fully engaged on the archwire (*Fig. 9*). The mandibular arch was bonded and the first lower archwire was .014" CuNiTi.

» In the 4th month of treatment, the archwire on the upper arch was changed to .014x.025" CuNiTi to continue the arch development, as well as to complete the leveling and alignment.

» In the 8th month of treatment, the right maxillary canine and adjacent lateral incisor were aligned (*Fig. 10*). The upper archwire was changed to .017x.025" TMA, and the upper 3-3 segment was ligated together with a figure-eight tie. A .014x.025" CuNiTi archwire was placed in the lower arch.

» In the 10th month of treatment, the archwire was


*Fig. 10:*
*After 8 months of treatment, the right maxillary canine and adjacent lateral incisor were aligned in preparation for space closure.*

changed to .019x.025" SS in the upper arch, with .017x.025" TMA in the lower arch. The lower 3-3 were ligated together by a figure-eight ligature tie. The upper and lower spaces were closed with elastomeric modules (*power chains*) on the main archwires. Both upper and lower arches were expanded with CuNiTi wires for 8 months.

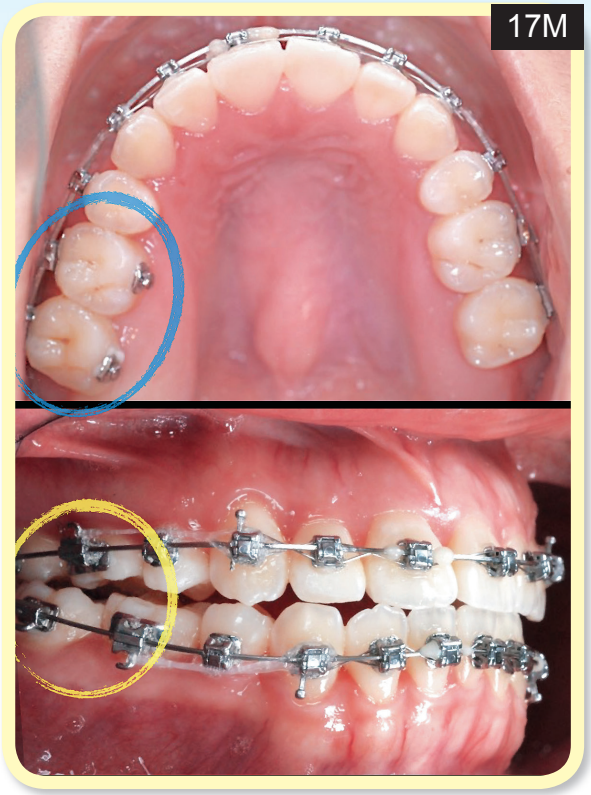



*Fig. 11:*
*Lingual buttons (blue circle) were bonded on the upper right molars to receive cross elastics to correct posterior crossbite (yellow circle).*

» In the 15th month of treatment, bilateral Class III elastics (*Bear 1/4", 4.5oz*) from the upper 1st molars to lower canines were used to resolve the sagittal discrepancy.

» In the 16th month of treatment, all four third molars were extracted.

» In the 17th month of treatment, the archwire was changed to .016x.025" SS in the lower arch. Lingual buttons were bonded on teeth #12 and #13, and full time cross elastics (*Chipmunk 1/8", 3.5oz*) were applied to correct lingual crossbite of #17 and #18 (*Fig. 11*) Expansion of the upper archwire and constriction of the lower archwire were performed to assist in correction of the right posterior lingual crossbite.

» In the 21st month of treatment, the lingual crossbite was corrected, and cross elastics were continued for one more month to achieve over-correction. Class III elastics were maintained to complete correction of the sagittal discrepancy.

» In the 24th month of treatment, the patient was instructed to wear one L-type elastic (*Bear 1/4", 4.5oz*) from the upper right molars to the lower right canine to correct midline and detail the occlusion.

» In the 28th month of treatment, overbite and overjet were both 1mm. As illustrated in Figure 12, two intermaxillary elastics (*Monkey, 3/8", 3.5oz*) from the maxillary central incisors to the lower first molars on the opposite side were used to close the bite for final detailing.

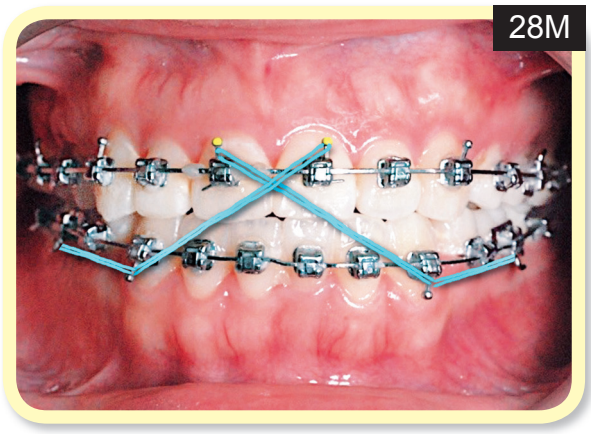



*Fig. 12:*
*Two elastics (Monkey, ⅜", 3.5oz) were stretched from the central incisor to the molar on the opposite side. Note that the elastic passes beneath the hook on the lower canines. This configuration was designed to deepen the bite in preparation for final detailing.*

After 32 months of active treatment, all appliances were removed. Upper and lower clear overlay and fixed anterior (*upper 2-2, lower 3-3*) retainers were delivered for both arches.

## Treatment Results

The patient was treated to the desired result as documented in Figs. 13-15. The cephalometric and panoramic radiographs before and after treatment are shown in Figs. 5 and 16, respectively. Superimposed cephalometric tracings are presented in Fig. 17. The summary of cephalometric measurements is provided in Table 1.

| CEPHALOMETRIC | | | |
|---|---|---|---|
| SKELETAL ANALYSIS | | | |
| | PRE-Tx | POST-Tx | DIFF. |
| *SNA°* | 81° | 80° | 1° |
| *SNB°* | 77° | 76° | 1° |
| *ANB°* | 4° | 4° | 0° |
| *SN-MP°* | 41° | 41° | 0° |
| *FMA°* | 34° | 34° | 0° |
| DENTAL ANALYSIS | | | |
| U1 TO NA mm | 7 mm | 4 mm | 3 mm |
| *U1 TO SN°* | 106° | 104° | 2° |
| L1 TO NB mm | 13 mm | 7 mm | 6 mm |
| *L1 TO MP°* | 108° | 95° | 13° |
| FACIAL ANALYSIS | | | |
| E-LINE UL | 0 mm | -1 mm | 1 mm |
| E-LINE LL | 5 mm | 2 mm | 3 mm |

Table 1: Cephalometric summary

*Fig. 13: Post-treatment facial photographs document a less protrusive orthognathic profile.*

*Fig. 14: Post-treatment intraoral photographs*

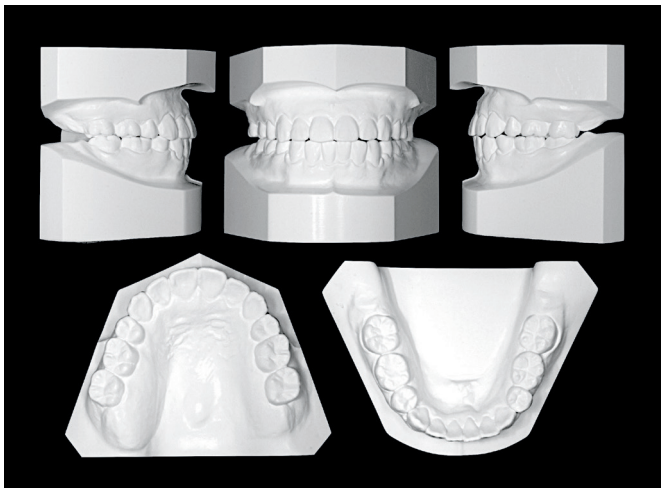


*Fig. 15: Post-treatment study models (casts)*

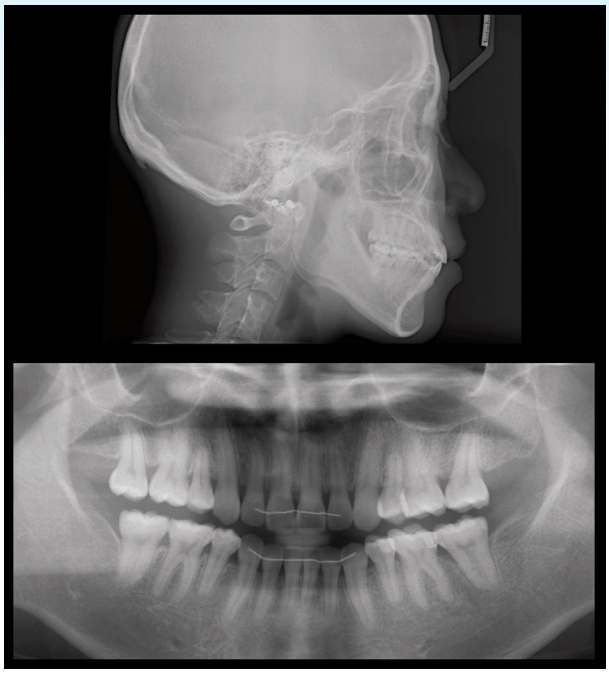


*Fig. 16:*
*Post-treatment cephalometric and panoramic radiographs*

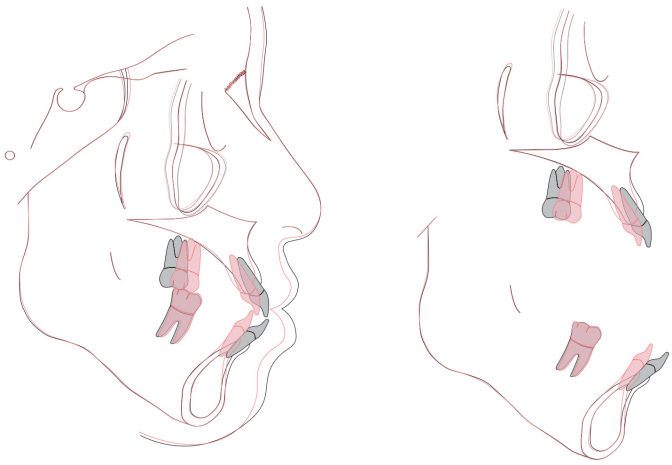


*Fig. 17:*
*Cephalometric tracings document the dental and skeletal changes during treatment. The pretreatment (black) and post-treatment (red) tracings are superimposed on the anterior cranial base (left), as well as on the stable skeletal landmarks of the maxilla (upper right), and mandible (lower right).*

The American Board of Orthodontics (*ABO*) Cast-Radiograph Evaluation (*CRE*) score was 24 points (*Worksheet 2*), as documented on the forms appearing later in this report. The major discrepancies were in bucco-lingual inclination (*9 points*). The maxillary dental midline deviation was decreased to 1mm right of the facial midline. All premolar-extraction space was closed and the blocked-out canine was well aligned.

The Pink & White dental esthetic score was 4 points (*Worksheet 3*), as documented on the form appearing later in this report. The gingival texture is healthy without any bony dehiscence or apparent bone loss.[4-5]

Overall, the anterior teeth were retracted (*Fig. 17*), the midline deviation as well as the right crossbite were significantly improved, and the maxillary arch was well expanded (*Fig. 14*). The patient was quite satisfied with the result (*Fig. 18*). Figs. 19a-d is a

*Fig. 18:*
*A post-treatment portrait photograph shows the final result, with which the patient was well satisfied.*


*Fig. 19a:*
*The frontal view of the treatment sequence is shown in clockwise order from pretreatment (upper left) to post-treatment (lower left). The months of treatment is shown in the black box in the upper right corner of each photograph.*

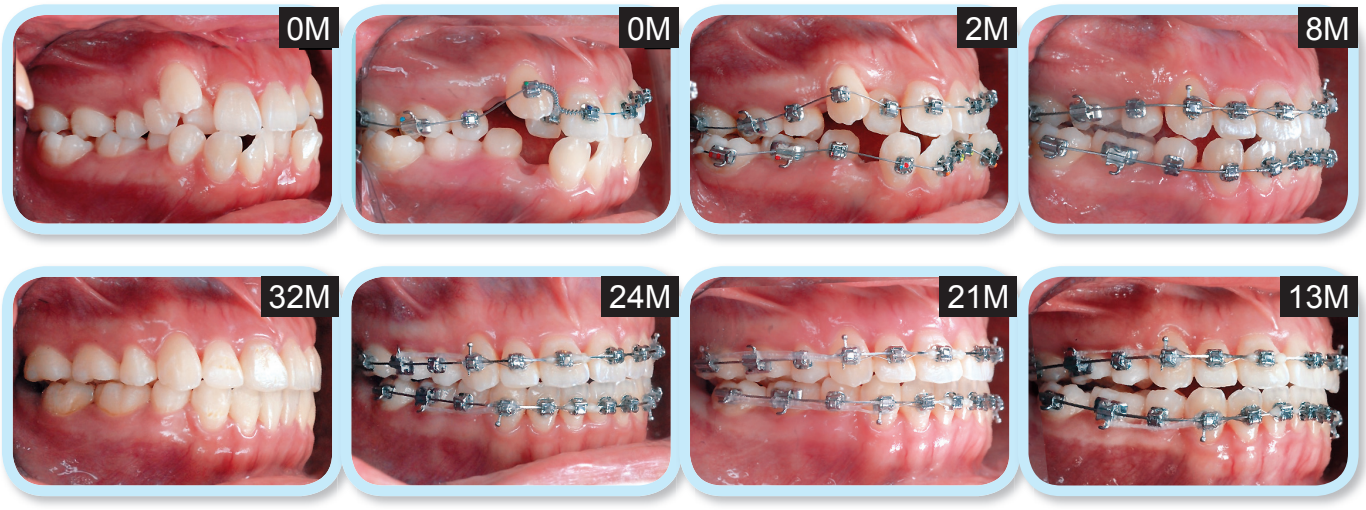



*Fig. 19b:*
*The right lateral view of the treatment sequence is shown in clockwise order from pretreatment (upper left) to post-treatment (lower left). The months of treatment is shown in the black box in the upper right corner of each photograph.*

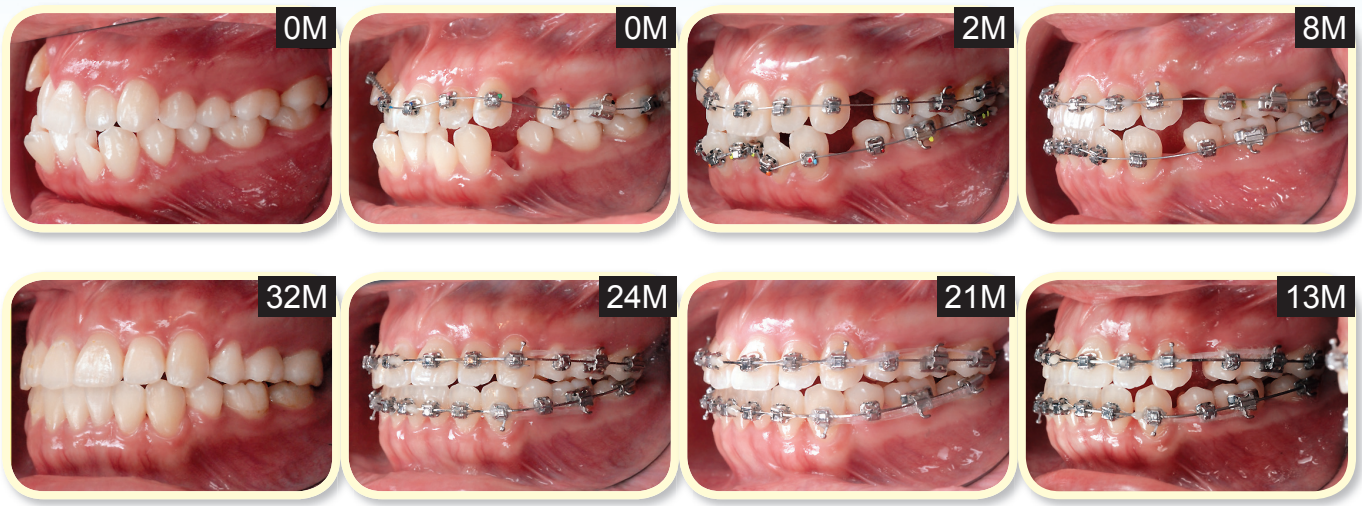



*Fig. 19c:*
*The left lateral view of the treatment sequence is shown in clockwise order from pretreatment (upper left) to post-treatment (lower left). The months of treatment is shown in the black box in the upper right corner of each photograph.*

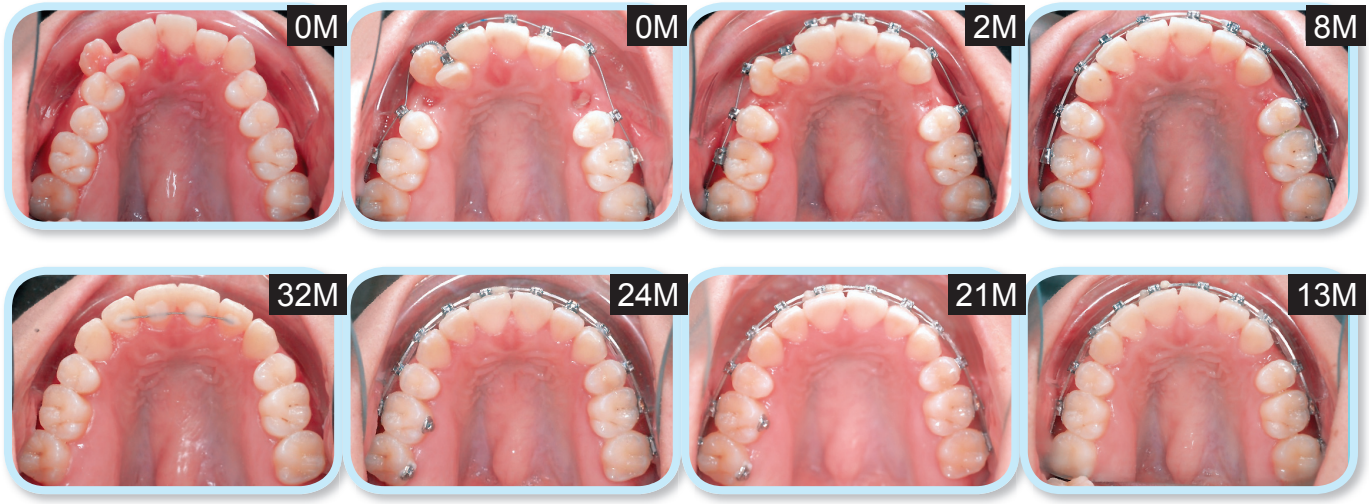



*Fig. 19d:*
*The maxillary occlusal view of the treatment sequence is shown in clockwise order from pretreatment (upper left) to post-treatment (lower left). The number of months of treatment is shown in the black box in the upper right corner of each photograph.*

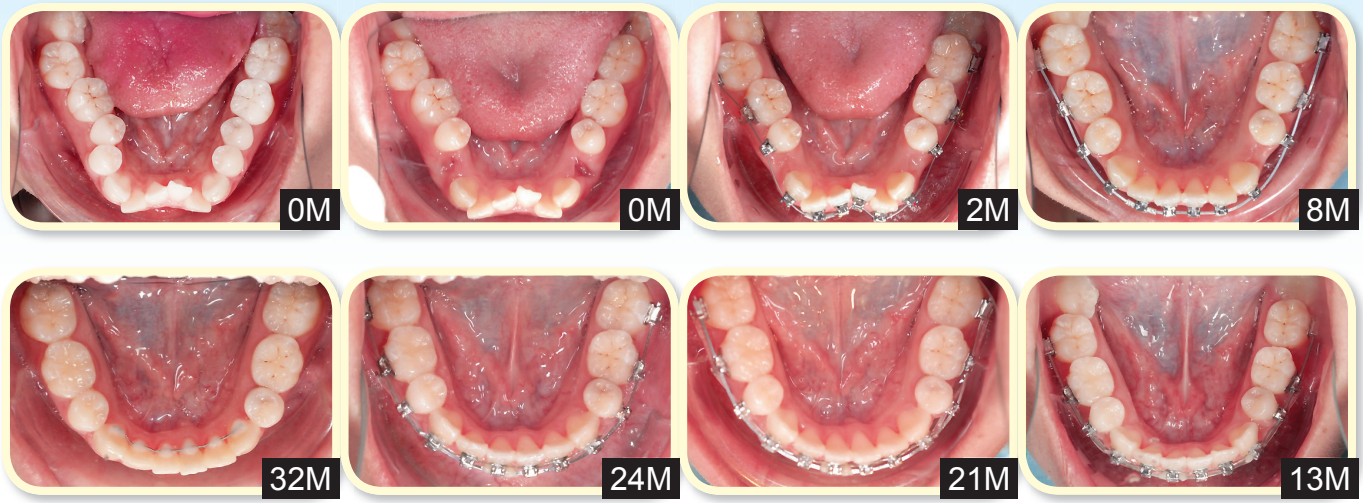



*Fig. 19e:*
*The mandibular view of the treatment sequence is shown in clockwise order from pretreatment (upper left) to post-treatment (lower left). The months of treatment is shown in the black box in the upper right corner of each photograph.*

sequence of intraoral photographs documenting the entire treatment sequence. Despite the asymmetric movement of the mandibular condyles during opening (*Fig. 6*), no significant temporo-mandibular disorders problems were noted during or after treatment.

Fixed retainers were bonded on all maxillary incisors and from canine to canine in the mandibular arch. Upper and lower clear overlay retainers were delivered. The patient was instructed to wear them full time for the first 6 months and then nights only. Home care and retainer maintenance instructions were also provided.

## Discussion

When maxillary lateral incisors are blocked out to the palate, an open coil spring between the central incisor and canine is often indicated to create space.[6] As the space opens, the central incisor tends to move anteriorly, and may irritate the buccal mucosa (*Fig. 20*). For the present patient a modified approach was used. The blocked out lateral incisor was bonded at the start of treatment, and the archwire segment with the coil spring was directly secured to the lateral with a plastic ligature. This mechanism applies a restraining force on the central incisor, resulting in space opening that primarily involves distal movement of the canine (*Fig. 19d*). Lip seal exercises were also introduced to help control maxillary incisor flaring. Figure 19d documents that this approach efficiently opened the space and helped correct the midline deviation, with minimal flaring of the central incisors.

Analyzing the extensive documentation provided by Figs. 19a-d, helped identify additional measures that would have further improved clinical efficiency:

1. Cross-elastics on the right side and an occlusal bite turbo on the left side from the beginning of

*Fig. 20:*
*The upper two illustrations show the result when an compressed open coil is used to open space for lateral incisors without engaging the blocked out teeth to decrease the tendency for central incisor flaring.[6] The lower two pictures from this case report show of the lateral incisor bracket with a plastic ligature to help control central incisal flaring and mucosal irritation. See text for details.*

the treatment would have resolved the crossbite during the initial alignment phase. However, this approach requires close supervision because of the extrusive components of the cross-elastic (*Fig. 21*), particularly since the present patient has a high mandibular plane angle. To control this problem, buccal shelf miniscrews[7-8] provide direct skeletal anchorage with an intrusive component which is useful for controlling buccal segment extrusion to correct a canted occlusal plane.

2. Extracting the right lower third molar before bonding the lower arch would prevent blocking the path of tooth movement, as the lingual tipped second molar was uprighted.

3. Applying Class III elastics and space closure

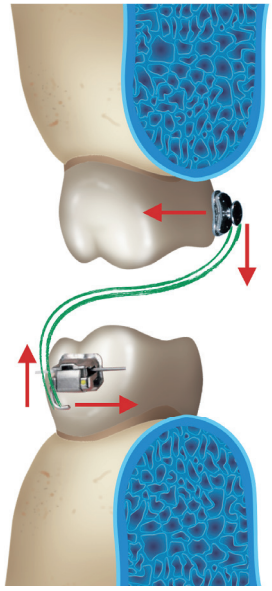


*Fig. 21:*
*"Through the bite" or cross elastics produce the desired horizontal force to correct a crossbite. However, side effects are the vertical forces that tend to extrude the teeth. The latter must be carefully monitored to avoid excessive opening of the bite anteriorly.[9]*

power chains earlier in the treatment would produce more efficient intermaxillary alignment.

It is important to integrate correction of the dental midlines into the space closure phase of treatment. Minor midline discrepancies at the finishing stage are not a significant problem, but it is quite difficult to correct large discrepancies after extraction spaces have been closed and occlusal relationships have been established.[10]

An upper 5mm midline discrepancy to the right was noticed before treatment, which was primarily related to crowding on the right side. After first premolar extraction and preliminary alignment, the midline discrepancy decreased to 2mm in 24 months. Then the patient was instructed to wear one L-type elastic (*Bear 1/4", 4.5oz*) from the upper right molars to the lower right canine to correct the midline and detail the occlusion. In the 27th month of treatment, the midline discrepancy decreased to 1mm. Alkhal[11] suggested that spontaneous midline correction can be facilitated by delaying extraction of the premolar on the crowded side; this approach also reduces the chance that the crowded canine will drop into occlusion in the wrong position.

Dental alignment and gingival margin contour were improved after the treatment (*Fig. 22*). Following treatment the maxillary dental midline was 1.0mm to the right of the facial midline, which is an insignificant problem because Kokich, Kiyak and Shapiro[12] found

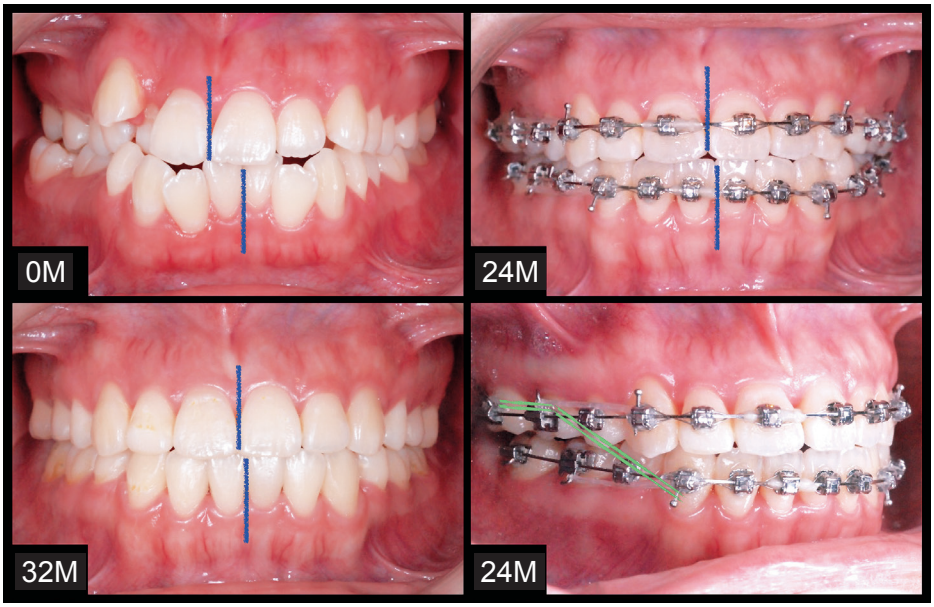



*Fig. 22:*
*A 5mm midline discrepancy with the maxilla to the right was noticed before treatment (0M). After severe crowding on the right upper arch was relieved, midline discrepancy reduced to 2mm in the 24th month of treatment (24M) without any specific midline mechanics (upper right). Then the patient was instructed to wear one L-type elastic (Bear ¼", 4.5oz) from the upper right molars to the lower right canine (lower right). After treatment the maxillary dental midline was still deviated ~1.0mm to the right of the facial midline (32M).*

that a 4mm midline discrepancy relative to the facial midline is undetectable by lay people and general dentists. Concurrently, the patient was well satisfied with her esthetic results. Two years later, the dento-facial result was stable (*Fig. 23*).

## Conclusion

A patient presented with severe, asymmetric crowding in both arches, a blocked-out maxillary canine, an asymmetric Class III/I molar relationship, and a 5mm midline discrepancy. The DI for this challenging malocclusion was 32. Extraction of four first premolars and asymmetric space closure corrected an unattractive smile and irregular dentition, producing a board quality result in 32 months. A careful assessment of the clinical records suggested that refinements in the treatment protocol might have produced a more efficient resolution of malocclusion, probably significantly decreasing the treatment time.

*Fig. 23: Two years later, the dento-facial result was stable.*

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# Discrepancy Index Worksheet

**TOTAL D.I. SCORE** 32

## OVERJET

| | | |
|---|---|---|
| 0 mm. (edge-to-edge) | = | |
| 1 – 3 mm. | = | 0 pts. |
| 3.1 – 5 mm. | = | 2 pts. |
| 5.1 – 7 mm. | = | 3 pts. |
| 7.1 – 9 mm. | = | 4 pts. |
| > 9 mm. | = | 5 pts. |

Negative OJ (x-bite) 1 pt. per mm. per tooth = 4

Total = 4

## OVERBITE

| | | |
|---|---|---|
| 0 – 3 mm. | = | 0 pts. |
| 3.1 – 5 mm. | = | 2 pts. |
| 5.1 – 7 mm. | = | 3 pts. |
| Impinging (100%) | = | 5 pts. |

Total = 0

## ANTERIOR OPEN BITE

0 mm. (edge-to-edge), 1 pt. per tooth
then 1 pt. per additional full mm. per tooth

Total = 0

## LATERAL OPEN BITE

2 pts. per mm. per tooth

Total = 0

## CROWDING (only one arch)

| | | |
|---|---|---|
| 1 – 3 mm. | = | 1 pt. |
| 3.1 – 5 mm. | = | 2 pts. |
| 5.1 – 7 mm. | = | 4 pts. |
| > 7 mm. | = | 7 pts. |

Total = 7

## OCCLUSION

| | | |
|---|---|---|
| Class I to end on | = | 0 pts. |
| End on Class II or III | = | 2 pts. per side 2 pts. |
| Full Class II or III | = | 4 pts. per side _____ pts. |
| Beyond Class II or III | = | 1 pt. per mm. additional _____ pts. |

Total = 2

## LINGUAL POSTERIOR X-BITE

1 pt. per tooth Total = 2

## BUCCAL POSTERIOR X-BITE

2 pts. per tooth Total = 0

## CEPHALOMETRICS (See Instructions)

ANB ≥ 6° or ≤ -2° = 4 pts.

Each degree < -2° _____ x 1 pt. = _____

Each degree > 6° _____ x 1 pt. = _____

SN-MP

≥ 38° = 2 pts

Each degree > 38° 3 x 2 pts. = 6

≤ 26° = 1 pt.

Each degree < 26° _____ x 1 pt. = _____

1 to MP ≥ 99° = 1 pt.

Each degree > 99° 9 x 1 pt. = 9

Total = 15

## OTHER (See Instructions)

| | | |
|---|---|---|
| Supernumerary teeth | _____ x 1 pt. = | _____ |
| Ankylosis of perm. teeth | _____ x 2 pts. = | _____ |
| Anomalous morphology | _____ x 2 pts. = | _____ |
| Impaction (except 3rd molars) | _____ x 2 pts. = | _____ |
| Midline discrepancy (≥3mm) | @ 2 pts. = | 2 |
| Missing teeth (except 3rd molars) | _____ x 1 pts. = | _____ |
| Missing teeth, congenital | _____ x 2 pts. = | _____ |
| Spacing (4 or more, per arch) | _____ x 2 pts. = | _____ |
| Spacing (Mx cent. diastema ≥ 2mm) | @ 2 pts. = | _____ |
| Tooth transposition | _____ x 2 pts. = | _____ |
| Skeletal asymmetry (nonsurgical tx) | @ 3 pts. = | _____ |
| Addl. treatment complexities | _____ x 2 pts. = | _____ |

Identify:

Total = 2

## IMPLANT SITE

Lip line : Low (0 pt), Medium (1 pt), High (2 pts) =

Gingival biotype : Low-scalloped, thick (0 pt), Medium-scalloped, medium-thick (1 pt) High-scalloped, thin (2 pts) =

Shape of tooth crowns : Rectangular (0 pt), Triangular (2 pts) =

Bone level at adjacent teeth : ≤ 5 mm to contact point (0 pt), 5.5 to 6.5 mm to contact point (1 pt), ≥ 7mm to contact point (2 pts) =

Bone anatomy of alveolar crest : H&V sufficient (0 pt), Deficient H, allow simultaneous augment (1 pt), Deficient H, require prior grafting (2 pts), Deficient V or Both H&V (3 pts) =

Soft tissue anatomy : Intact (0 pt), Defective ( 2 pts) =

Infection at implant site : None (0 pt), Chronic (1 pt), Acute( 2 pts) =

Total = 0

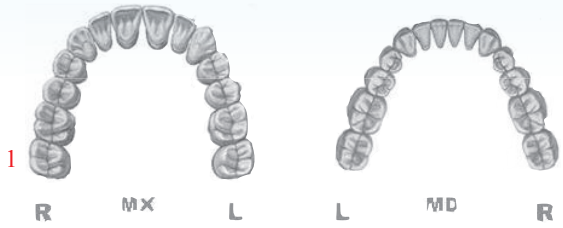
# Cast-Radiograph Evaluation

**Case #** **Patient**

**Total Score:** 24

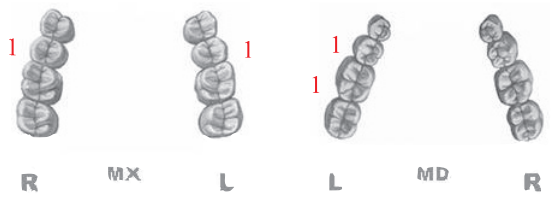
## Alignment/Rotations

1



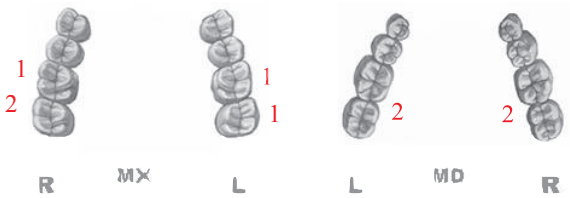

## Marginal Ridges

4




## Buccolingual Inclination

9

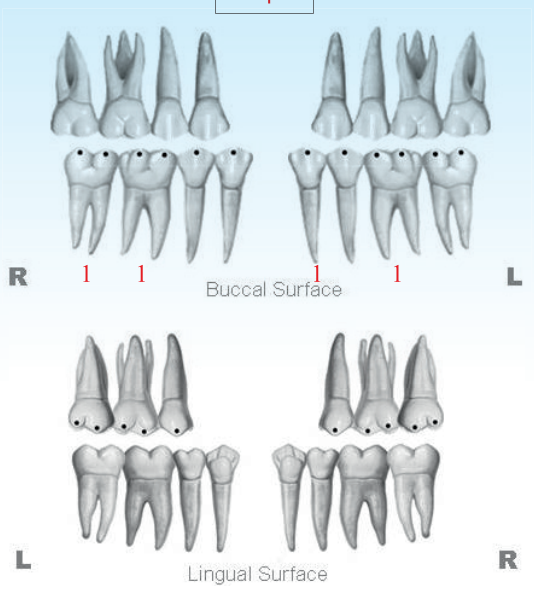



## Overjet

1


## Occlusal Contacts

4

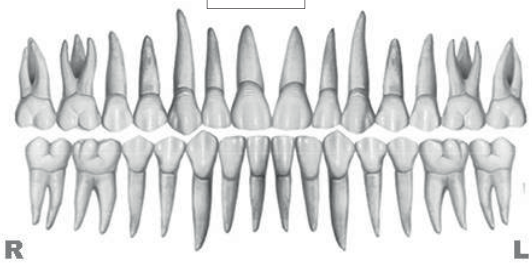



## Occlusal Relationships

1

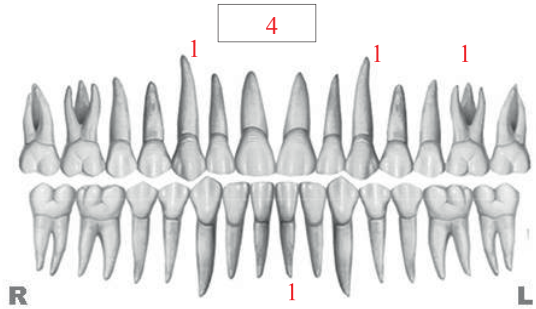

## Interproximal Contacts

0




## Root Angulation

4



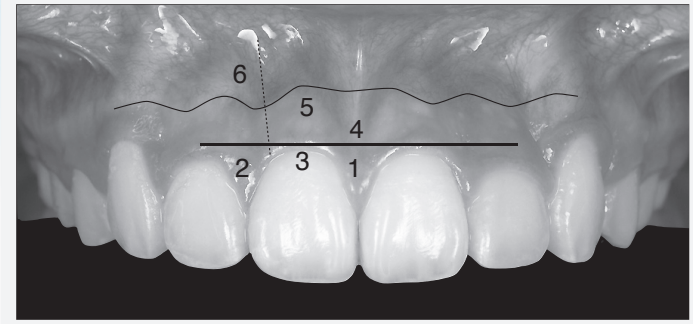

***INSTRUCTIONS: Place score beside each deficient tooth and enter total score for each parameter in the white box. Mark extracted teeth with "X". Second molars should be in occlusion.***

# IBOI Pink & White Esthetic Score (Before Surgical Crown Lengthening)

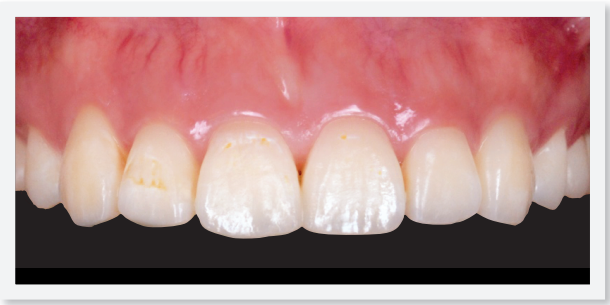
**Total Score: =** 4

## 1. Pink Esthetic Score

Total = 0



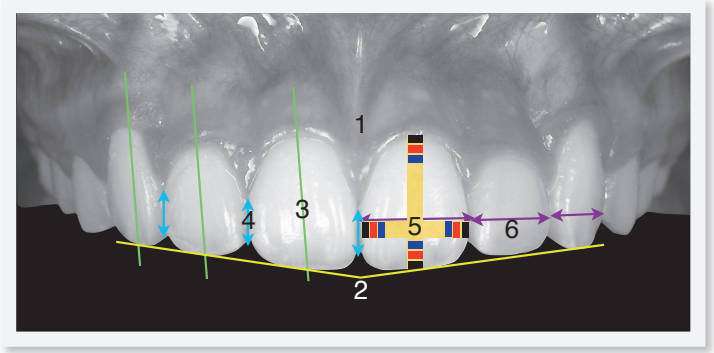

| | | | |
|---|---|---|---|
| 1. M-D Papilla | 0 | 1 | 2 |
| 2. Keratinized Gingiva | 0 | 1 | 2 |
| 3. Curvature of Gingival Margin | 0 | 1 | 2 |
| 4. Level of Gingival Margin | 0 | 1 | 2 |
| 5. Root Convexity ( Torque ) | 0 | 1 | 2 |
| 6. Scar Formation | 0 | 1 | 2 |



| | | | |
|---|---|---|---|
| 1. M & D Papilla | (0) | 1 | 2 |
| 2. Keratinized Gingiva | (0) | 1 | 2 |
| 3. Curvature of Gingival Margin | (0) | 1 | 2 |
| 4. Level of Gingival Margin | (0) | 1 | 2 |
| 5. Root Convexity ( Torque ) | (0) | 1 | 2 |
| 6. Scar Formation | (0) | 1 | 2 |

## 2. White Esthetic Score ( for Micro-esthetics )

Total = 4




| | | | |
|---|---|---|---|
| 1. Midline | 0 | 1 | 2 |
| 2. Incisor Curve | 0 | 1 | 2 |
| 3. Axial Inclination (5°, 8°, 10°) | 0 | 1 | 2 |
| 4. Contact Area (50%, 40%, 30%) | 0 | 1 | 2 |
| 5. Tooth Proportion (1:0.8) | 0 | 1 | 2 |
| 6. Tooth to Tooth Proportion | 0 | 1 | 2 |

| | | | |
|---|---|---|---|
| 1. Midline | 0 | (1) | 2 |
| 2. Incisor Curve | 0 | (1) | 2 |
| 3. Axial Inclination (5°, 8°, 10°) | 0 | (1) | 2 |
| 4. Contact Area (50%, 40%, 30%) | (0) | 1 | 2 |
| 5. Tooth Proportion (1:0.8) | 0 | (1) | 2 |
| 6. Tooth to Tooth Proportion | (0) | 1 | 2 |