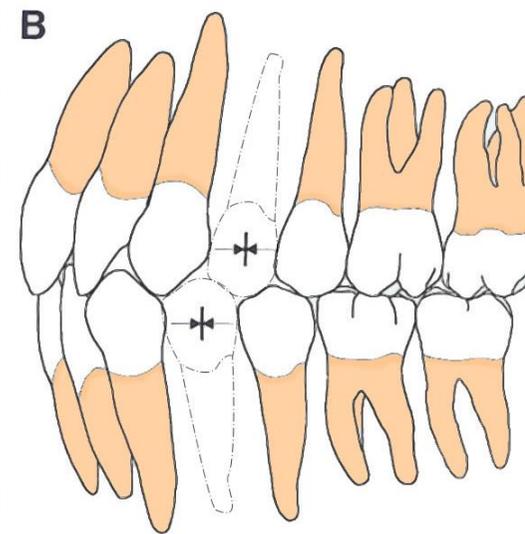
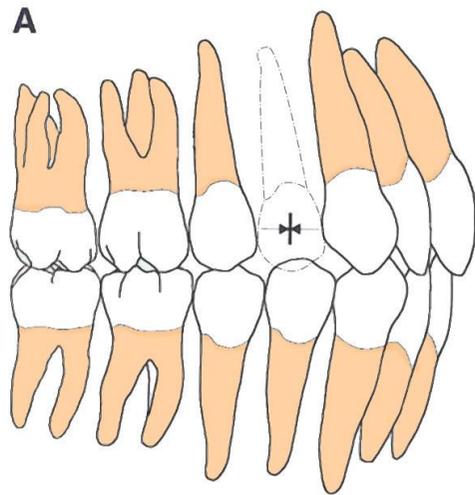


EXTRAÇÕES ASSIMÉTRICAS



ASSIMETRIA

n A a

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Causas da assimetria

n Síndromes craniofaciais

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Causas da assimetria

n Assimetria da mandíbula pode surgir a partir

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n Assimetrias dentro do arco sup. ou inf.

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DIAGNÓSTICO DIFERENCIAL DAS DISCREPÂNCIAS DE LINHA MÉDIA

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(Burstone)

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Linha média facial

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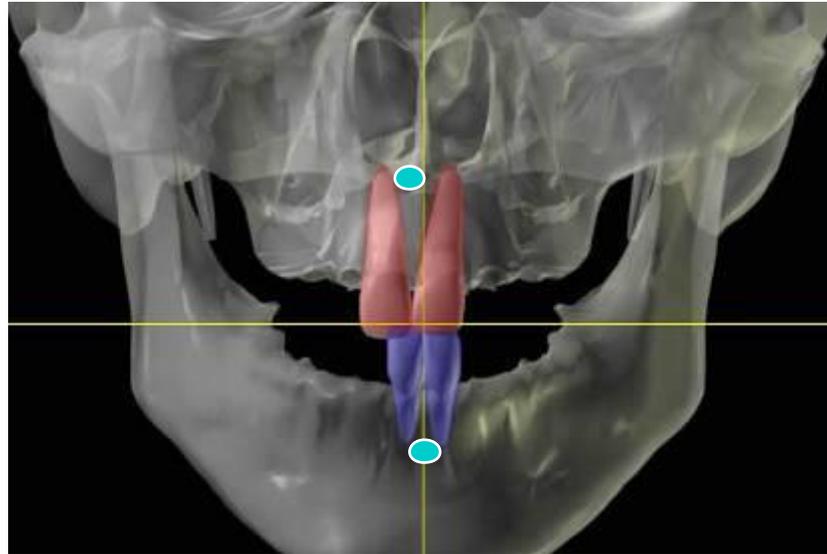
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n Pa

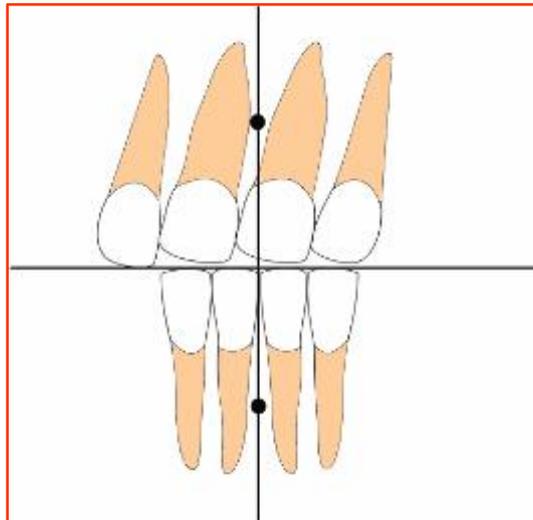
Linha média da base apical

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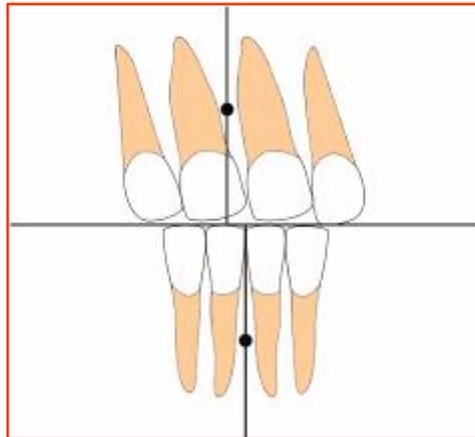
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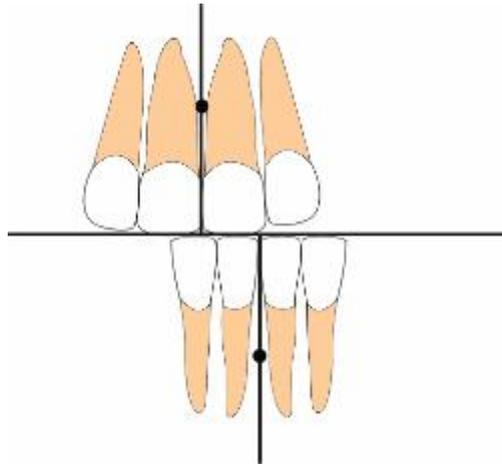
Desvio da linha média superior sem discrepância da base apical. Os incisivos superiores estão inclinados

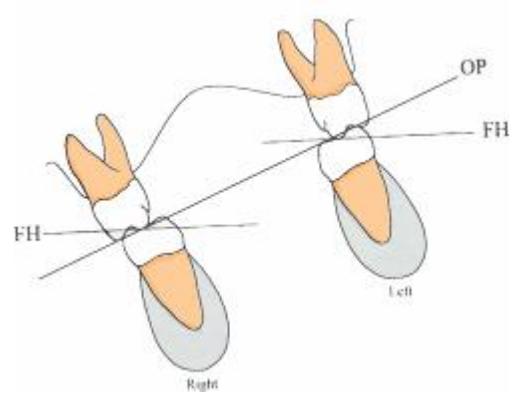
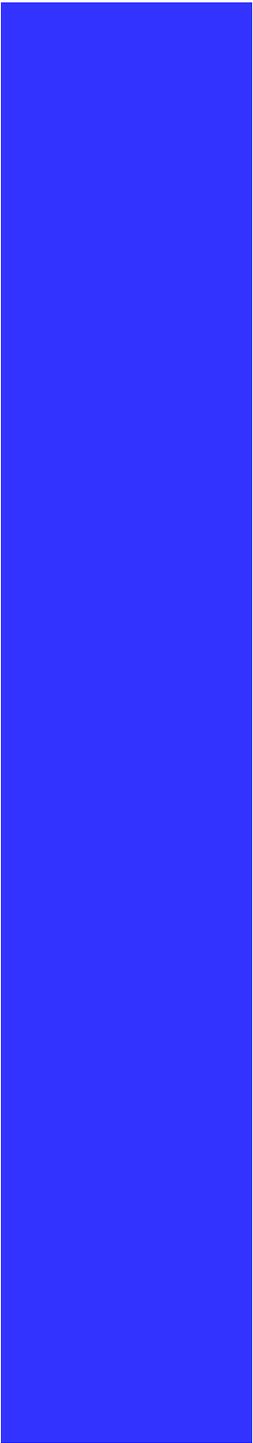


As linhas médias dentárias estão alinhadas. A discrepância da base apical é mascarada pela inclinação compensatória dos incisivos superiores para a esquerda.



Desvio da linha média dentária superior para direita.
Problema esquelético com discrepância da base apical.





Correção das linhas médias

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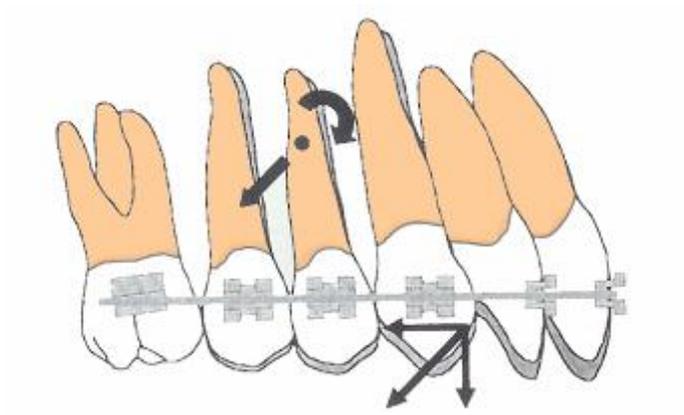
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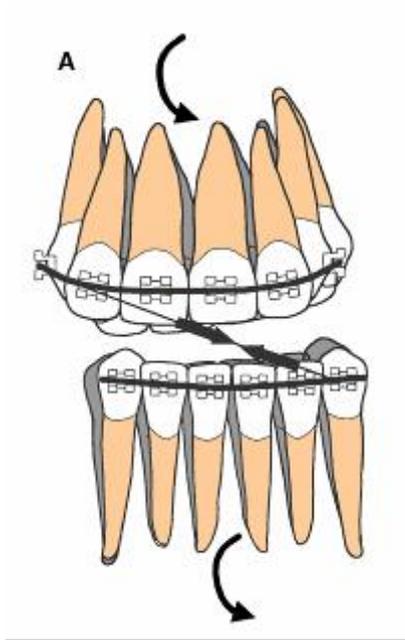
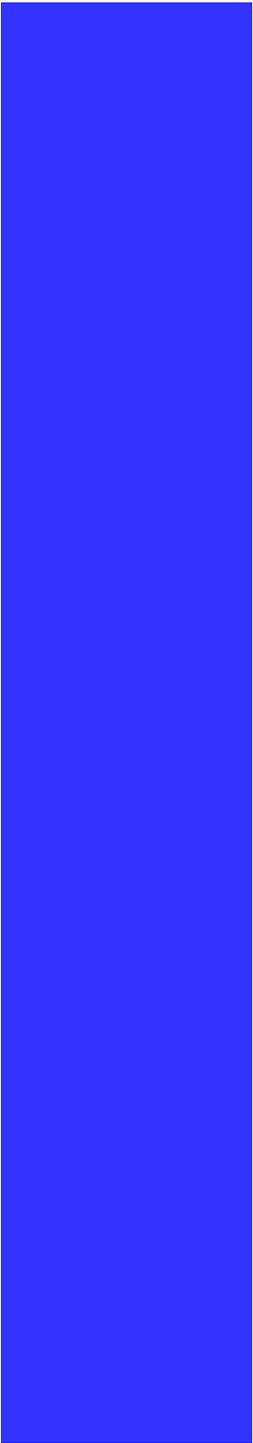


recidiva

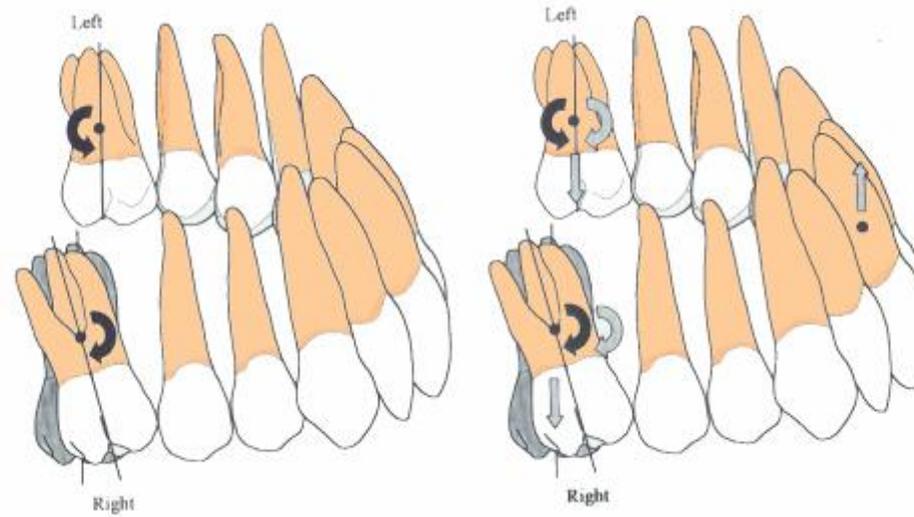
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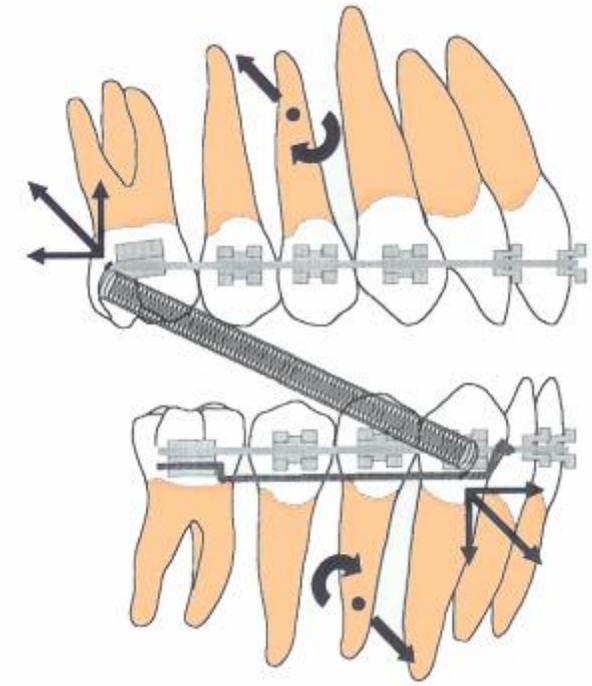
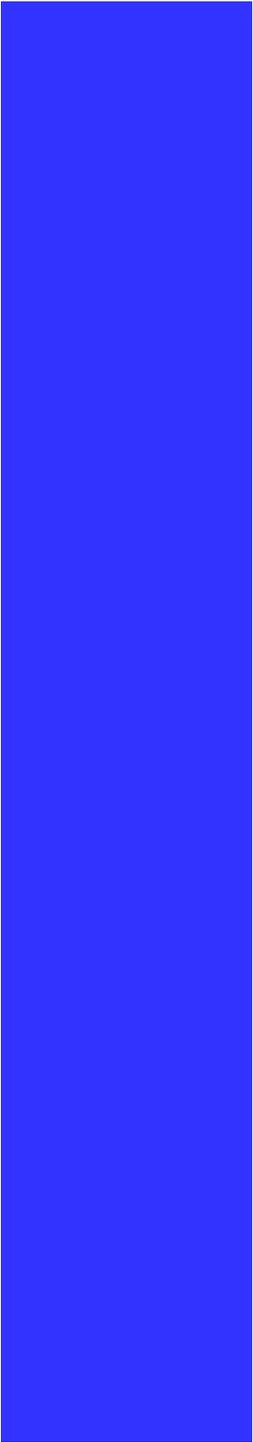
Elástico de Classe II





Mecânica de rotação





Desvio da linha média inferior com simetria esquelética

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Classe II subdivisão

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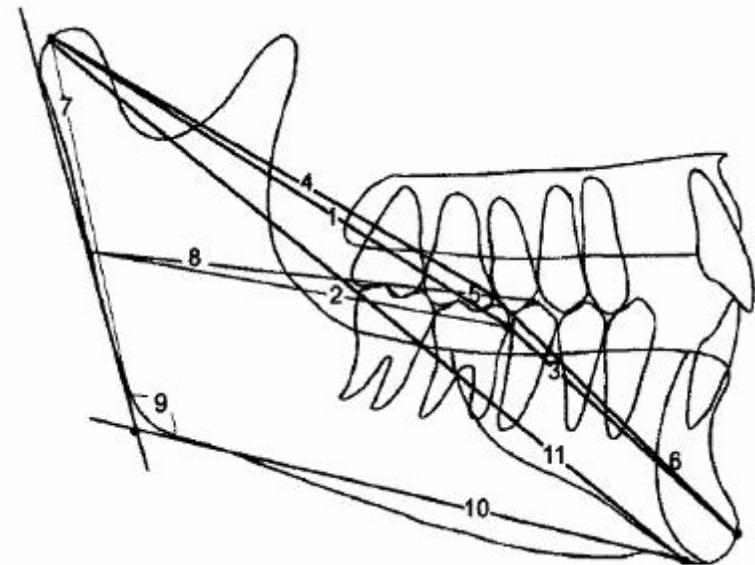
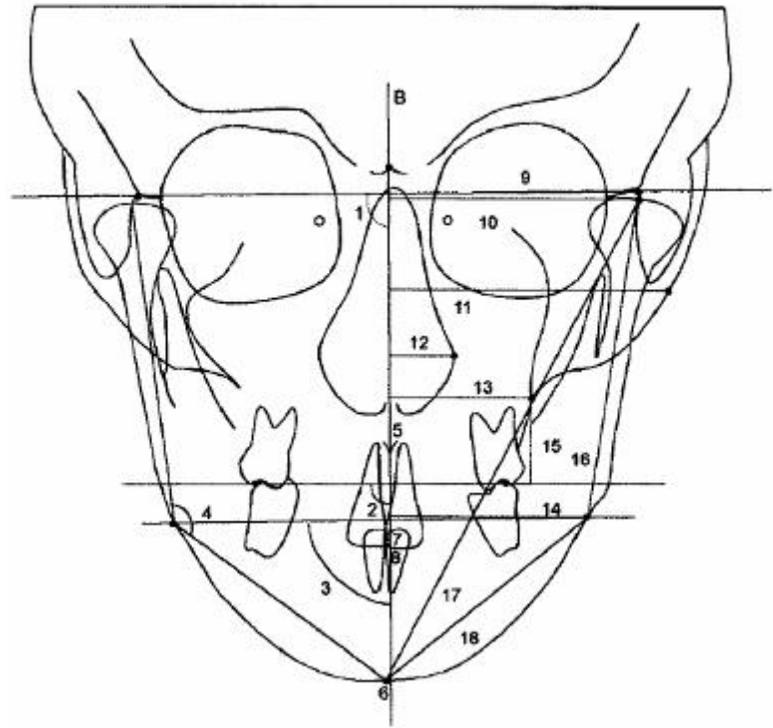
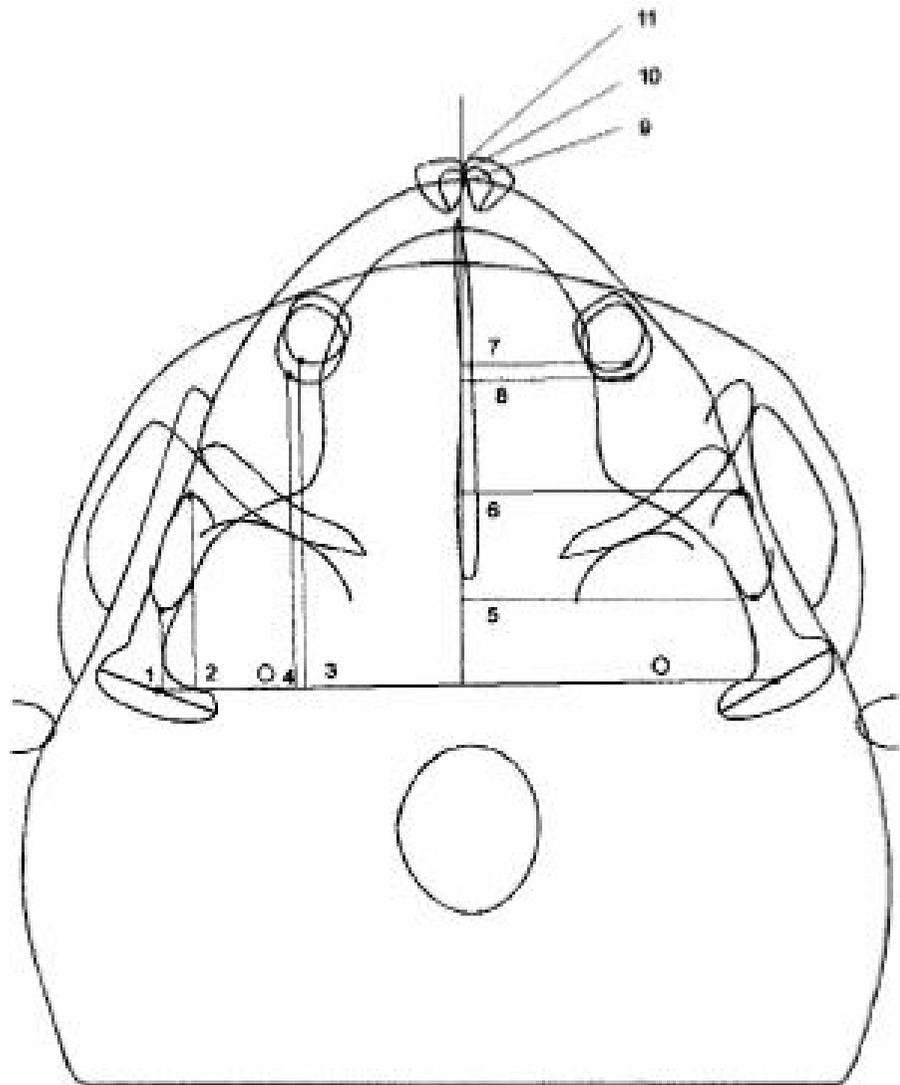
Three-dimensional evaluation of skeletal and dental asymmetries in Class II subdivision malocclusions

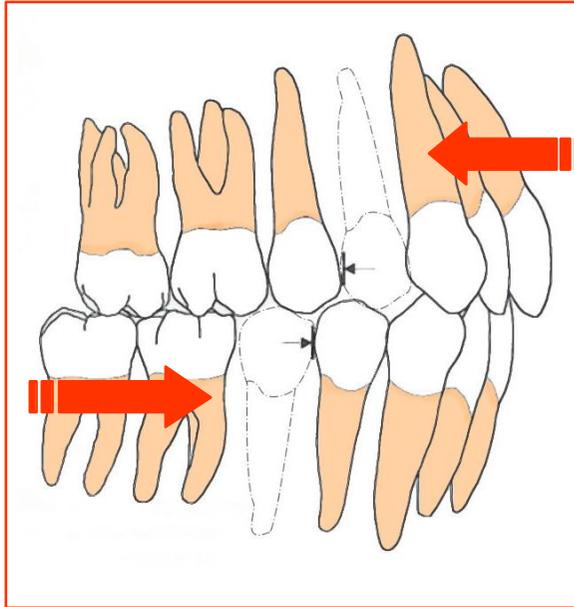
Guilherme R. P. Janson, DDS, MSc, PhD, MRCDC,^a Angelos Metaxas, DDS, MSc, PhD,^b Donald G. Woodside, DDS, MSc(D), PhD,^c Marcos Roberto de Freitas, DDS, MSc, PhD,^d and Arnaldo Pinzan, DDS, MSc, PhD^e
Bauru, Brazil, and Toronto, Canada

The objective of this study was to determine if any significant differences existed with regard to dental and skeletal asymmetries between subjects with Angle Class II subdivision malocclusions and subjects with normal occlusions. The sample consisted of 30 subjects in each of the 2 groups. Each possessed a full complement of permanent teeth, including first molars. The average age of subjects was 15.76 years in the Class II subdivision group and 22.42 years in the normal occlusion group. Measurements were obtained with the use of submentovertex, posteroanterior, and corrected oblique cephalometric radiographs. In the submentovertex radiographs, symmetry was assessed by measuring the relative differences in the spatial positions of dental and skeletal landmarks between the right and the left sides in both anteroposterior and transverse dimensions. Coordinate systems were used to represent the mandible, cranial floor, and the maxilla. In the posteroanterior radiographs, symmetry was assessed similarly by measuring the relative differences in the spatial positions of dental and skeletal landmarks between the right and the left sides. In the corrected oblique radiographs, symmetry was assessed by measuring the differences in size of dental and skeletal structures between the right and the left sides. Variables were analyzed with multivariate logistic regression analysis. The results demonstrated that the primary contributor to the differences between the 2 groups was the distal positioning of the mandibular first molars on the Class II side in patients whose mandibles showed no unusual skeletal or positional asymmetries. A secondary contributor was the mesial positioning of the maxillary first molars on the Class II side. Furthermore, the posteroanterior radiographic analysis showed that the more frequent distal positioning of the mandibular molars on the Class II side, compared with the mesial positioning of the maxillary molars on that side resulted in mandibular dental midline deviation to the Class II side more frequently than the maxillary dental midline to the opposite side. (*Am J Orthod Dentofacial Orthop* 2001;119:406-18)

Although some studies have already described many characteristics of Class II subdivision malocclusions, some questions persist regarding the origin and etiologic factors of unilateral malocclusions. Alavi et al¹ concluded that the primary factor contributing to an anteroposterior discrepancy in this type of malocclusion was the unilateral distal position-

ing of mandibular first molars. However, they did not determine whether it was due to dentoalveolar or skeletal asymmetry. Rose et al² confirmed the distal positioning of the mandibular first molars in Class II subdivision malocclusions but did not evaluate the anteroposterior positioning of the maxillary first molar as a possible contributing factor to the malocclusion.





Por que não
extrair quatro
pré-molares?

É necessário
fechamento
completo do
espaço

Extrações assimétricas

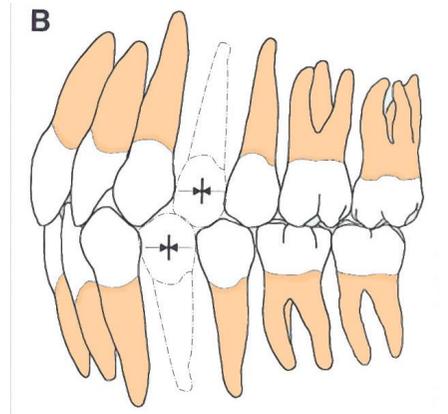
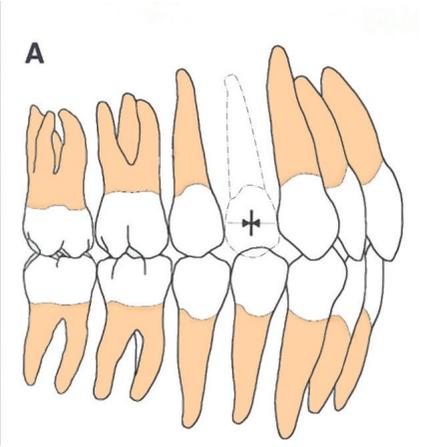
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Class II subdivision treatment success rate with symmetric and asymmetric extraction protocols

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Bauru, São Paulo, Brazil

The purpose of this study was to compare the success rates of Class II subdivision malocclusion patients treated with either symmetric or asymmetric extractions. The sample consisted of 51 patients with Class II subdivision malocclusion. The patients were divided into 2 groups. Group 1 included 28 patients who were treated with 4 premolar extractions. The 23 patients in group 2 were treated with 3 premolar extractions (2 maxillary premolars and 1 mandibular premolar on the Class I side). The initial and final study models were evaluated by means of Grainger's treatment priority index (TPI). Individual evaluations of improvements in maxillary-to-mandibular dental midline deviation, overjet, and overbite were also made. The final mean TPI and the mean improvement in TPI and in the other variables of each group were compared with independent *t* tests. The results showed a statistically significant difference only for the improvement in maxillary-to-mandibular dental midline deviation of the groups. The 3-premolar-extraction group had a greater improvement of the initial interdental midline deviation. There is a tendency for a slightly better treatment success rate when Class II subdivision patients are treated with asymmetric extraction of 3 premolars, compared with extraction of 4 premolars. (*Am J Orthod Dentofacial Orthop* 2003;124:257-64)

Patients with Class II subdivision malocclusions have Class I characteristics on one side and Class II characteristics on the other, primarily because of the distal positioning of the mandibular first molar in relation to the maxillary first molar on the Class II side.¹⁻³ This malocclusion can also be produced by the more mesial position of the maxillary first

whereas the mandibular dental midline is usually displaced toward the Class II side.¹⁻³ The possible treatment approaches include symmetric extraction of 4 premolars and asymmetric extraction of 3 premolars.³⁻⁷ The 4-premolar-extraction approach will produce a final occlusion with bilateral Class I molar and canine relationships. However, attaining a Class I molar rela-

Dentoskeletal treatment changes in Class II subdivision malocclusions in submentovertebral and posteroanterior radiographs

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Bauru, São Paulo, Brazil, and Toronto, Ontario, Canada

The objective of this study was to evaluate the dentoskeletal changes consequent to orthodontic treatment in subjects with Class II subdivision malocclusions, treated with asymmetric extractions, compared with a normal-occlusion control group. The sample consisted of 3 groups, with 30 subjects in each: normal-occlusion subjects (group 1), untreated Class II subdivision subjects (group 2), and Class II subdivision patients treated with asymmetric extractions (group 3). All subjects had a full complement of permanent teeth at the beginning of treatment. The average ages of the subjects were 22.42, 15.76, and 18.57 years, respectively, in groups 1, 2, and 3. Measurements of relative differences in the spatial position of dental and skeletal bilateral landmarks were obtained from the submentovertebral and posteroanterior cephalometric (PA) radiographs. The *t* test for independent samples was used to compare group 1 with groups 2 and 3 at different times. Results from the submentovertebral radiograph showed that asymmetric extractions in Class II subdivision malocclusions will maintain the differences in the anteroposterior positions of right and left, maxillary and mandibular first molars, as would be expected with the treatment protocols used. There were no significant skeletal changes that could be attributed to the treatment approaches investigated or transverse collateral effects with the asymmetric mechanics used. It was also demonstrated that treatment of Class II subdivision malocclusions with asymmetric extractions produced corrections of maxillary and mandibular dental midline deviations with the midsagittal plane, without canting the occlusal plane or any other investigated horizontal plane, as seen in the PA radiograph. Treatment of Class II subdivision malocclusions with asymmetric extractions constitutes a beneficial approach to this problem. (*Am J Orthod Dentofacial Orthop* 2004;126:451-63)

Class II subdivision malocclusion asymmetries are predominantly dentoalveolar and are characterized primarily by distal positioning of the mandibular first molar on the Class II side, in a

mandible with no unusual skeletal or positional asymmetries. Secondly, there is mesial positioning of the maxillary first molars on that side.¹⁻³ Consequently, in many Class II subdivision patients, the maxillary dental midline will be coincidental or show minimal deviation relative to the clinical facial midline. However, the

Desvio das linhas médias superior e inferior com simetria esquelética

