## Angle's Class II division 1 associated to mandibular retrusion and skeletal open bite: a 5-year post-orthodontic/orthopedic treatment follow-up

Gustavo Tirado Rodrigues<sup>1</sup>



DOI: https://doi.org/10.1590/2177-6709.22.5.098-112.bbo

Obtaining long term stability allied to functional and aesthetic balance is the main goal of any orthodontic-orthopedic therapy. This case report describes the orthodontic therapy applied to a 7-year-9-month old child, who presented a Class II, division 1 malocclusion associated to skeletal open bite. Functional and skeletal corrections (sagittally and vertically) were obtained by means of mandible advancement achieved with a closed Balter's bionator appliance followed by a fixed appliance. This approach showed to be efficient in accomplishing both functional and aesthetic goals, that were kept stable five years after the treatment was finished. This case report was presented to the Board of Directors of the Brazilian Board of Orthodontics and Facial Orthopedics (BBO), as partial requirement to becoming a Diplomate of the BBO.

Keywords: Angle's Class II Malocclusion. Mandible Retrusion. Open bite. Corrective Orthodontics. Stability.

## INTRODUCTION

This case report describes the orthodontic treatment of a 7-year-9-month old male patient, during the second transitional period of mixed dentition, who presented at the clinic for treatment with the chief complaint of having excessively protruded teeth ("too flared"). According to the mother, a slight advancement had been accomplished by the previous orthodontic intervention, during which a fixed palatal bar was used. After an otolanryngologic assessment, the boy was diagnosed as a partial mouth breather and presented a diffuse nasal edema, with hypertrophic turbinates and adenoids. Despite those findings, the case was treated non-surgically. The clinical examination revealed satisfactory hygiene and a low cavity rate. Primary canines (53, 63 and 83) were prematurely lost.

## DIAGNOSIS

Patient's face presented marked features of chronic mouth-breathing, associated to a severe muscle hypotonia and an everted lower lip. A light protrusive functional deviation was observed during mandible closure, together with speech impairment, anteriorly positioned tongue and thumb sucking habit. Patient also lacked passive lip closure (5.0 mm), with a rather hypotonic upper lip. His lower lip was both

» The author reports no commercial, proprietary or financial interest in the products or companies described in this article.

Submitted: July 03, 2017 - Revised and accepted: July 26, 2017

How to cite: Rodrigues GT. Angle's Class II division 1 associated to mandibular retrusion and skeletal open bite: a 5-year post-orthodontic/orthopedic treatment follow-up. Dental Press J Orthod. 2017 Sept-Oct;22(5):98-112. DOI: https://doi.org/10.1590/2177-6709.22.5.098-112.bbo

» Patients displayed in this article previously approved the use of their facial and intraoral photographs.

**Contact address**: Gustavo Tirado Rodrigues Rua Terêncio Sampaio 429, Bairro Grageru – CEP: 49.025-700 – Aracaju/SE E-mail: gustavo.orthoesp@gmail.com

<sup>&</sup>lt;sup>1</sup>Universidade Tiradentes, Curso de Especialização em Ortodontia (Aracaju/SE, Brazil).