

Adult Functional Class III : Clinical Case

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Clinical case description

41 year old male patient with no relevant clinical history, arrived to the office presenting an apparent skeletal class III. After the clinical exam with correct mandibule manipulation, the patient reached a class I edge-to-edge occlusion. The treatment plan was started by using an occlusal splint in centric, to do a neuromuscular deprogramming for 12 months. After that time, an articulator montage and cephalometric study was done. The patient was then informed that the treatment would take roughly 30 months. Initially he would only wear braces in the upper jaw (for 6 months) and then in the lower jaw. He was equally informed that, despite this treatment, he could still need an orthognathic surgery.

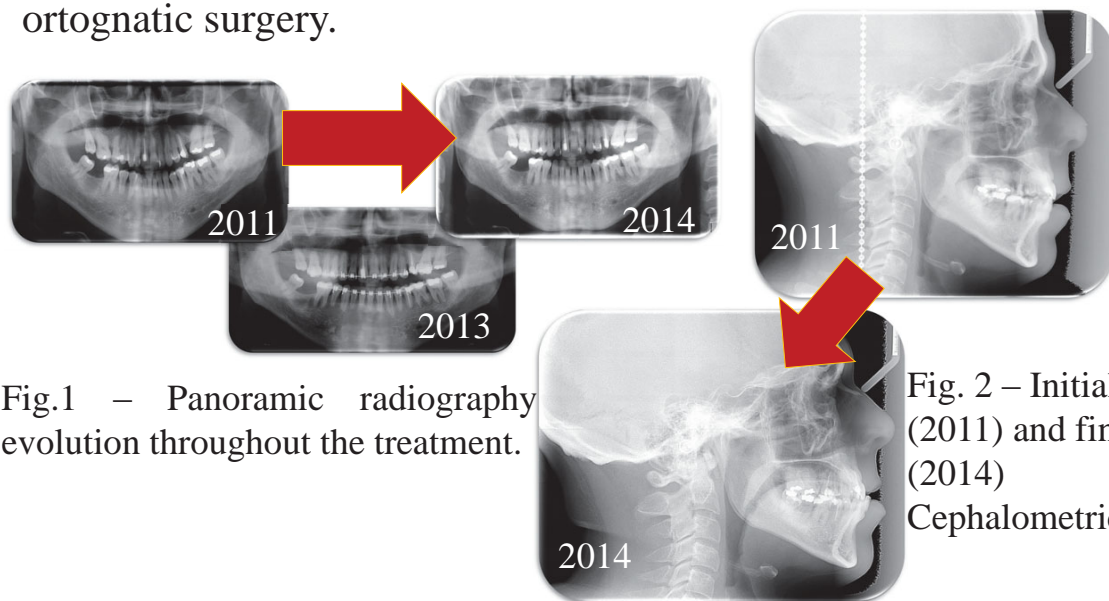


Fig.1 – Panoramic radiography evolution throughout the treatment.



Fig. 2 – Initial (2011) and final (2014) Cephalometrics

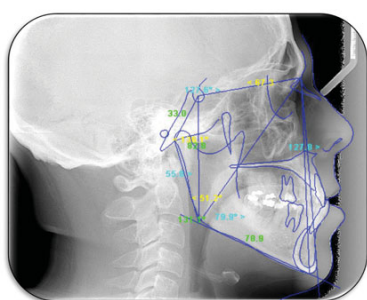


Fig. 3 – Bjorg-Jaraback cephalometric layout.

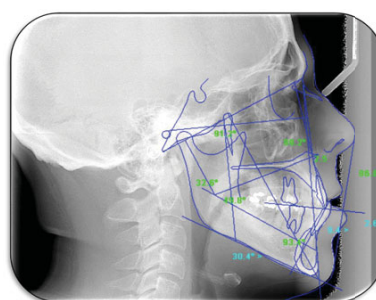
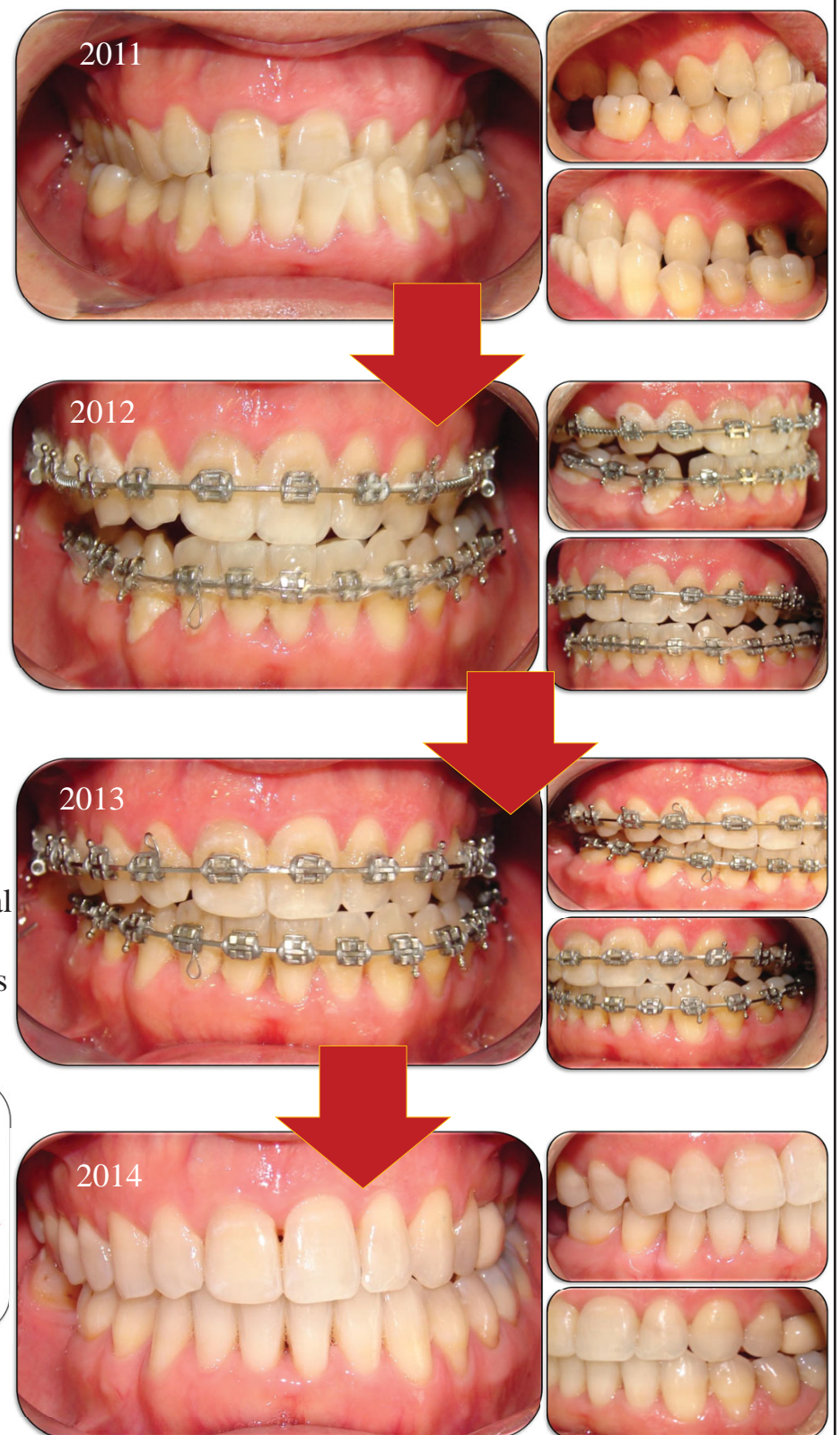


Fig. 4 – Resumed Ricketts cephalometric layout.



Fig. 5 – Visual treatment analysis (VTO).



Discussion

The Class III malocclusion is characterized by an inadequate anterior and posterior dental relationship, which may or may not be accompanied by skeletal changes. In general, the facial aspect is very committed, especially when associated with disability in the middle third, and this, in most cases, is the main factor that motivates the patient to seek orthodontic treatment. The diagnosis and treatment plan in malocclusion Class III differs due to the predominance of a functional component. The patient must always be informed of the duration of the treatment, and still with the possibility of needing orthognathic surgery after treatment, depending on the progression of the case.

Conclusion

The resulting treatment was satisfactory, both functionally and aesthetically. The unwinding of crossbite was possible. The midline alignment with stable occlusion was possible and the patient features good symmetry and adequate exposure of the upper incisors.

Bibliography: Brunetto A. R., *Orthodontic retreatment of a class III patient with significant midline asymmetry and bilateral posterior crossbite*, Dental Press J. Orthod. 2015 Jan-Feb;20(1):118-26.
Bayerl M. L. M., *Two-phase treatment of patients with crossbite and tendency toward skeletal Class III malocclusion*, Dental Press J. Orthod. 2014 July-Aug;19(4):122-35

Keywords: Classe III, Angle, malocclusion, teeth, crossbite, jaw, surgery