Acellerated orthodontic movement in space closure using corticotomy technic and low level laser therapy lineal clinical trial in treatment patients

Abstract

The combination of clinical reported corticotomy and application of low level laser therapy in our field has been reported as a complimentary therapy to accelerate orthodontic movement and space closure. In this work we gather part of the studies of our team that has been working with laser therapy for over 8 years. In the clinical trial we use a team of 5 persons (1 orthodontist, 1 periodontist and 3 dental fellows’ assistants) to design our research in 20 patients in ages between 35 and 55 years, 12 boys and 8 women. We designed first surgical corticotomy in both sides of the upper maxilar specifically in the space of extraction in first premolars, in class II patients after the extraction procedure has been execute by the specialist. As soon as the day after if the extraction we procede to do the corticotomy in both right and left side but only in the left side we start to applicate the diode laser. We continue to see the patients for the regular orthodontic appointment apling the laser with the correspondent technique for the next five month. In 18 of the patients after five month the space of application was totally close using lace back tecnique with regular metal brackets 022 Roth Galaxy. The space of non-application close only by a 60%, calculating that it would take almost 4 months more to complete the correct space closure. This combined technique only use by a few of the research institution has lead us for excellent results, also seems to be precise and do not represent any risk for the patients treated. The whole clinical trial, pre designed, clinical paperwork and legal authorization, and conclusion analysis took the team about 9months.

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Biography
Julio Castro has completed his Master degree from Universidad Central de Venezuela, currently works at the Escuela de Medicina , Instituto Medicina Tropical, Central University of Venezuela.

Citation: Julio Castro, Acellerated orthodontic movement in space closure using corticotomy technic and low level laser therapy lineal clinical trial in treatment patients, World Dental 2020, 6th World Congress on Dentistry and Dental Materials, August 26-27, 2020, 03.