Mini-implant selection protocol applied to MARPE

Lincoln Issamu Nojima¹, Matilde da Cunha Gonçalves Nojima¹, Amanda Carneiro da Cunha¹, Natan Oliveira Guss², Eduardo Franzotti Sant’Anna¹

Introduction: Rapid maxillary expansion (RME) is the therapy of choice to correct skeletal transverse dimension in children and adolescents, associating orthopedic and dental effects. In an attempt to prevent the undesirable dentoalveolar effects and optimize the potential of skeletal expansion in individuals in advanced stages of skeletal maturation, the miniscrew-assisted rapid palatal expander (MARPE) was proposed by Lee et al. in 2010.

Objective: This paper presents a systematized protocol for selection of miniscrews indicated for MARPE, by the evaluation of cone-beam computed tomographies (CBCT). Variables related with the bone and soft tissue thicknesses at the palatal regions of interest, as well as in relation to the fixation rings of miniscrews of the palatal expander are analyzed and discussed to provide better performance in the clinical practice.

Keywords: Palatal expansion technique. Orthodontic anchorage procedures. Malocclusion. Transverse maxillary atresia.

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¹ Universidade Federal do Rio de Janeiro, Department of Pediatric Dentistry and Orthodontics (Rio de Janeiro/RJ, Brazil).
² Universidade Federal do Rio de Janeiro, Post-graduation Program in Orthodontics (Rio de Janeiro/RJ, Brazil).

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

Contact address: Lincoln Issamu Nojima
Av Professor Rodolpho Paulo Rocco, 325 - Ilha do Fundão
Rio de Janeiro - RJ – Brasil – CEP: 21941-617
E-mail: linojima@gmail.com