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SUMMARY

The present work had to purpose evaluate the alterations produced in patients submitted to the fast expansion of maxilla by means of disjunction of the palatine suture median assisted surgically. The sample used to accomplish this study was composed of 34 pairs of models of 17 patients, being 6 of the masculine sex and 11 of the feminine sex. For each patient were prepared 2 pairs of models obtained in different phases: T 1 – initial (before the procedure pre-operations) and T 2 – three month post-shutdown of the screw expensor. The device expensor used in this sample was Hyrax appliance (13mm of expansion). The adopted surgical procedure left from an osteotomy in the lateral walls of maxilla without the involvement of the laminates Pterigoid, osteotomy of the nasal spine to the dental average line (previous incisors), separation of the palatine suture median by means of chisel and separation of nasal septum. The beginning of the activation occurred 3 days of the post-surgical being $\frac{1}{4}$ by morning and $\frac{1}{4}$ at night, the activations followed clinical criteria for the control of the expansion. The results show that there was a statistically significant expansion in the cusped, first and second bicuspid teeth, first molar teeth and molar teeth seconds, respectively 6,03mm,

9,82mm, 8,66mm, 9,72mm and 5,67mm. Space obtained among central and lateral incisors did not show statistically significant, the obtained values were respectively: 0,40mm and 4,12mm, such values resulted from action of the alveolar fibers that resulted in a larger inclination mesial of the central incisors and, in smaller intensity, of the lateral incisors. Evaluated the effects of the entry examinations inclinations were noted that in the first molar teeth met itself statistically significant values, being 6,89° right sides and 9,56° sides on an average left. For the first premolar teeth the obtained values were 3,26° to the side right, which was considered statistically not significant and 4,74° to the side left statistically significant. Evaluating the length of the arc to maxilar, an average reduction between 28,20mm analyzed intervals T1 mm and T2 26,56 mm was observed varying - 1,64mm. We can conclude that the ERM-AC produced an expansion to maxila with inclination initial of the crowns of posterior teeth and reduction in the length of the arc to maxila, the other analyzed variable had not statistically showed significant alterations in the measured intervals. We can conclude that the RMESA produced an expansion to maxilar with inclination initial of the crowns of posterior teeth and reduction in the length of the arc to maxilar, the other analyzed variable had not statistically showed significant alterations in the measured intervals.