Objective: To evaluate two fixation methods used for the advancement of the chin, through: (1) steel wire and (2) positional screws.

Method: The sample consisted of 20 patients who underwent genioplasty to advance through the slide basilar osteotomy for intra-oral approach which was employed in 10 patients with fixing a steel wire (0.018 inches) - group 1 and 10 patients with screw fixation positional System 2.0 mm - group 2. The comparison of stability was obtained from measurements on cephalometric x-rays taken preoperatively (T0), postoperative immediate intervention (T1) and 6 months after intervention (T2). We compared the vertical and horizontal segment of the advanced study of the three times from a specific cephalometric tracing. Results: For individuals in group 1, the increase observed was 6.6mm between T1 - T0, where T0 average was 9.8 mm and mean T1 was 16.5 mm. At 6 months follow up there was recurrence of 0.4 mm, T2 - T1, and observed an average of 16.0 mm T2. Vertically there was recurrence of 0.5 mm at late follow-up between T2 - T1 where average values were observed in T1 and T2 43.5 mm by 45.7 mm. In group 2 progress observed was 5.6mm, T1 - T0 where the average values of T0 and T1 were respectively 8.5 mm and 14.1 mm. The relapse was 0.4 mm in monitoring, T2 - T1, T2 average value of 13.6 mm. Vertically there was recurrence of 0.2 mm, T2 - T1, with average values of T1 and T2 respectively 45.2 mm and 45.7 mm. Conclusion: There was no difference in skeletal stability between the groups, both methods are effective in fixing genioplasty to advance.

Keywords
Mandible, Fracture fixation, Bone remodeling.