

Longitudinal study of mandibular behavior in Class I subjects with vertical and horizontal growth

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Editor's summary

The pattern of craniofacial growth may determine mandibular rotations during the growth and development of the craniofacial complex, which affects directly the orthodontic planning, treatment and prognosis. The aim of this study was to analyze and compare the mandibular growth longitudinally in Class I patients with horizontal or vertical pattern. It was analyzed the lateral cephalograms of 20 patients from the Burlington Growth Centre, University of Toronto, Canada. These patients were divided into two groups (n=10), depending on the initial growth pattern. The craniofacial growth was assessed at ages 9, 12 and 21 years. The lateral

cephalograms were properly traced, and cephalometric measurements were performed by Dento-facial Planner Plus 2.1. Differences between groups were evaluated using independent *t* test ($p < 0.05$). The results demonstrated more retrognathic position of the mandible in dolichofacial patients; however, the same amount of mandibular growth (Co-Gn) was observed in both groups in the evaluated period. On the other hand, it was verified no changes at SN.GoMe angle in dolichofacial patients, in contrast to the brachyfacial patients, in which it was noted a gradual decrease of this angle, showing a counterclockwise mandibular rotation during craniofacial growth and development.

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