Kinesiographic three-dimensional evaluation of mandibular border movements: a statistical study in a normal young nonpatient group.

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Mandibular border movements were studied in a group of 74 healthy young men and women with sound dentitions and class I molar relationships. Movements were directly performed by the subjects and recorded with a mandibular kinesiograph, and slopes of the first millimeters of motion in the anterior and lateral guidances were calculated. In anterior guidance, the sagittal plane slope was steeper in men than in women, whereas the horizontal plane slope showed no gender differences. In the lateral guidances, frontal plane slopes were steeper in men than in women, with no side differences. The horizontal plane slope presented no side or sex differences. Most of the subjects demonstrated asymmetric guidances for both protrusive and the laterotrusive movements. These findings suggest that criteria for defining the norm should include asymptomatic asymmetry instead of strict morphologic symmetric appearance.

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