Objective

The purpose of this study was to describe and analyse cephalometric floating norms to describe the individual skeletal pattern of Chinese people by constructing a harmony box. This harmony box based on cephalometric floating norms may used as a diagnostic tool in orthodontics. By using Chinese cephalometric data, the harmonious relationship between five cephalometric variables can give a prognosis in treatment planning for this population.

Materials and Methods

139 cephalometric x-ray from Chinese people undergoing an orthodontic treatment at the University of British Columbia, Canada, were landmarked. They were separated into 58 females under 18 years, 18 females over 18, 14 males over 18, and 49 males under 18. Each picture was analysed with 40 landmarks, in which 5 angular measurements (SNA, SNB, N-S-Ba, NL-NSL, ML-NSL) were digitised. By using linear regression analysis, a harmony-box-like form was constructed.

The five variables correlated significantly with each other. A harmony box was constructed by using the linear regression analysis. This harmony scheme was divided into three zones. To be reliant on the facial type, it was separated into prognadic, orthopgnadic and retrognadic. As shown in the constructed harmony box, most of the analysed samples were more prognadic.

Results

The craniofacial pattern with the five correlating variables based on a sample of Chinese cephalometrics were inserted into a harmony-box-like form.

Conclusion

The craniofacial pattern with the five correlating variables based on a sample of Chinese cephalometrics were inserted into a harmony-box-like form.

Key Words: Harmony box, floating norms, cepahlometrics, Chinese population