Correlation between the anteroposterior relationship of dental arch and skeletal jaw base in Chinese (Wuhan) population

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The study was done to determine the anteroposterior dental arch & skeletal jaw base relationship in Chinese (Wuhan) population with class I, II & III malocclusion and to correlate the association between the sagittal dental arch and the skeletal jaw base relationship. Lateral cephalometric radiographs, intraoral and extra oral photographs and the orthodontic casts of 472 untreated orthodontic patients with permanent full dentition till first molar was collected. Then the anteroposterior dental arch relationship was determined by Angle’s Classification from the intraoral photographs and the orthodontic casts. Anteroposterior skeletal jaw-base relationship was determined by ANB Angle, WITS Appraisal and Beta Angle from the lateral cephalometric radiographs. The anteroposterior relationship of dental arch and skeletal jaw-base were then compared. Angle’s classification of dental malocclusion does not reflect the true anteroposterior skeletal jaw-base relationship. The result of this study shows that only around one half of the anteroposterior dental arch relationship coincides with the underlying skeletal jaw base relationship. Among the measurements means used to assess the anteroposterior jaw base relationship, BETA angle shows the highest correlation or agreement between the anteroposterior dental arch and skeletal jaw base relationship followed by ANB angle and then WITS APPRAISAL.

Biography
Manju Gubhaju completed BDS from BPKHS, Nepal and joined Masters Dental Surgery (Orthodontics) as a Nepal Government Nominee for Chinese Government scholarship in China at Huazhong University of Science & Technology. She is currently working as a Lecturer in department of Orthodontics at Lumbini Medical College & teaching hospital. Her interest lies not only in clinical practice but also in academic teachings and research.

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