Permanent first molar band sizes in a group of Thai orthodontic patients

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Objective The purposes of this study were to determine the frequencies and modes of permanent first molar band sizes in Thai orthodontic patients, to compare permanent first molar band sizes between males and females, between right and left side teeth, between upper and lower teeth, and between Thais and Caucasians.

Materials and methods Retrospective study from records of 300 orthodontic patients (116 males and 184 females) treated in Graduate Dental Clinic, Chulalongkorn University were collected. Descriptive statistics were used to find the frequencies and modes of permanent first molar band sizes, and to compare between males and females. Analytic statistics in Sign Test was used to compare between right and left side teeth, and between upper and lower teeth. Comparing between Thais and Caucasians, Kolmogorov-Smirnov Test was analyzed.

Results The frequencies were found. The modes of # 16, # 26 and # 36 band sizes were 36.5 equally, while those of # 46 were 36.0 and 37.0. The permanent first molar band sizes between males and females were different. There was no significant difference between right and left side teeth. But those between upper and lower teeth, and between Thais and Caucasians were significantly different (p<0.0001).

Conclusion Permanent first molar band sizes between upper and lower teeth in Thai orthodontic patients, and between Thais and Causasians were different. Therefore, purchase of the permanent first molar bands for Thai patients should be based on the results of this study.

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